

NOVARTIS AG
Form 20-F
February 24, 2003

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As filed with the Securities and Exchange Commission on February 24, 2003

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

FORM 20-F

- ☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the fiscal year
ended December 31, 2002
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number 1-15024

NOVARTIS AG

(Exact name of Registrant as specified in its charter)

NOVARTIS Inc.

(Translation of Registrant's name into English)

Switzerland

(Jurisdiction of incorporation or organization)

**Lichtstrasse 35
4056 Basel, Switzerland**

(Address of principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of class</u>	<u>Name of each exchange on which registered</u>
American Depositary Shares each representing 1 ordinary share, nominal value CHF 0.50 per ordinary share, and ordinary shares	New York Stock Exchange, Inc.

Securities registered pursuant to Section 12(g) of the Act:

None

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

2,474,970,619 ordinary shares

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

Yes ☒ No ☐ Not Applicable

Indicate by check mark which financial statement item the Registrant has elected to follow:

Item 17 ☐ Item 18 ☒

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INTRODUCTION AND USE OF CERTAIN TERMS

Novartis AG and our consolidated subsidiaries ("Novartis" or the "Group") publish consolidated financial statements expressed in Swiss francs ("CHF"). Our consolidated financial statements found in Item 18 of this annual report on Form 20-F ("Form 20-F") are those for the year ended December 31, 2002. In this Form 20-F, references to "CHF" are to Swiss francs; references to "US dollars", "US\$" or "\$" are to the lawful currency of the United States of America; and references to "m" are to million. Solely for the convenience of the reader, this Form 20-F contains translations of certain Swiss franc amounts into US dollar amounts at specified rates. These translations should not be construed as

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representations that the Swiss franc amounts actually represent such US dollar amounts or could be converted into US dollars at the rate indicated or at any other rate. Unless otherwise indicated, the translations from Swiss francs into US dollars have been made at the market rate as quoted by the Reuters Market System in effect on December 31, 2002, which was \$1.00 = CHF 1.40.

In this Form 20-F, references to the "United States" or to "US" are to the United States of America, references to "Europe" are to all European countries (including Turkey, Russia and the Ukraine), references to the European Union ("EU") are to each of the 15 member-states of the EU and references to "Americas" are to North, Central (including the Caribbean) and South America, unless the context otherwise requires; references to "Novartis" or the "Group" are to Novartis AG and its consolidated subsidiaries; references to "associates" are to employees of our affiliates; references to the "FDA" are to the United States Food and Drug Administration. All product names appearing in italics are trademarks of Group companies. Product names identified by a "®" are registered trademarks of other companies. You will find the words "we," "our," "us" and similar words or phrases in this Form 20-F. We use those words to comply with the requirement of the United States Securities and Exchange Commission to use "plain English" in public documents like this Form 20-F. For the sake of clarification, each operating company in the Group is legally separate from all other companies in the Group and manages its business independently through its respective board of directors or other top local management body. No Group company operates the business of another Group company nor is any Group company the agent of any other Group company. Each executive identified in this Form 20-F reports directly to other executives of the company by whom the executive is employed, or to that company's board of directors.

We furnish to holders of our ordinary shares ("shares") annual reports that include a description of operations and annual audited consolidated financial statements prepared in accordance with International Accounting Standards ("IAS"). IAS differs in certain significant respects from Generally Accepted Accounting Principles in the United States ("US GAAP"). See "Item 18. Financial Statements note 31" for a description of the significant differences between IAS and US GAAP. The financial statements included in the annual reports are examined and reported upon by our independent accountants. We make available to our shareholders, on our web page, quarterly interim press releases that include unaudited interim consolidated financial information prepared in conformity with IAS with a reconciliation to US GAAP.

FORWARD-LOOKING STATEMENTS

This Form 20-F contains certain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, relating to our business and the industries in which we operate. Certain such forward-looking statements can be identified by the use of forward-looking terminology such as "believe," "expect," "may," "are expected to," "will," "will continue," "should," "would be," "seek" or "anticipate" or similar expressions or the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Such statements include descriptions of our investment and research and development programs and anticipated expenditures in connection therewith, descriptions of new products we expect to introduce and anticipated customer demand for such products. Such statements reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performances or achievements that may be expressed or implied by such forward-looking statements. Some of these factors are discussed in more detail herein, including under "Item 3. Key Information 3.D. Risk factors," "Item 4. Information on the Company," and "Item 5. Operating and Financial Review and Prospects." Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this Form 20-F as anticipated, believed, estimated or expected. We do not intend, and do not assume any obligation, to update any information or forward-looking statements set out in this Form 20-F.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information**3.A Selected Financial Data**

The financial data at December 31, 2002, 2001, 2000, 1999 and 1998 shown in the chart below are taken from audited financial statements. Our consolidated financial statements ("consolidated financial statements") for the years ended December 31, 2002, 2001 and 2000 are included elsewhere in this Form 20-F. All financial data should be read in conjunction with "Item 5. Operating and Financial Review and Prospects" and our consolidated financial statements and accompanying notes which are included elsewhere in this Form 20-F. All financial data presented in this Form 20-F are qualified in their entirety by reference to the consolidated financial statements and such notes.

The audited financial statements used to create the selected consolidated financial data set forth below were prepared in accordance with IAS. IAS differs in certain respects from US GAAP. For a discussion of the significant differences between IAS and US GAAP, see "Item 18. Financial Statements note 31."

For further information regarding continuing and discontinued activities (the Agribusiness Division), see "Item 4. Information on the Company 4.A. History and Development of Novartis" and "Item 5. Operating and Financial Review and Prospects 5.A. Operating Results."

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Year Ended December 31,

2002⁽¹⁾	2002	2001⁽²⁾	2000⁽²⁾	2000⁽²⁾⁽³⁾	1999⁽²⁾	1999⁽²⁾⁽³⁾	1998
(\$)	(CHF)	(CHF)	(CHF)	(CHF)	(CHF)	(CHF)	(CHF)

(in millions except per share data)

**INCOME STATEMENT
DATA****Amounts in accordance with IAS:**

Net sales	23,151	32,412	31,643	35,395	28,702	32,282	25,226	31,702
Operating income	5,634	7,887	7,277	7,883	6,727	7,343	6,696	6,920
Income from associated companies	(7)	(10)	139	98	97	383	376	239
Net financial income	678	949	1,067	1,091	1,216	793	990	759
Income before taxes and minority interests	6,305	8,826	8,483	9,072	8,040	8,519	8,062	7,918
Taxes	(1,064)	(1,490)	(1,440)	(1,820)	(1,504)	(1,833)	(1,683)	(1,882)
Minority interests	(16)	(23)	(19)	(42)	(25)	(27)	(20)	(26)
Net income	5,225	7,313	7,024	7,210	6,511	6,659	6,359	6,010
Basic earnings per share ⁽⁴⁾	2.08	2.91	2.73	2.75	2.50	2.50	2.40	2.28
Diluted earnings per share ⁽⁴⁾	2.03	2.84	2.72	2.75	2.50	2.50	2.40	2.28
Cash dividends ⁽³⁾	1,639	2,294	2,194	2,064		1,935		1,663
Cash dividends per share ^{(4),(5)}	0.68	0.95	0.90	0.85		0.80		0.73
Operating income from continuing operations per share:								
basic earnings per share ⁽⁴⁾	2.24	3.14	2.83	2.58	2.58	2.53	2.53	2.20
diluted earnings per share ⁽⁴⁾	2.19	3.07	2.82	2.58	2.58	2.53	2.53	2.20

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- (1) The Swiss franc amounts have been translated into US dollars at the rate of CHF 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, US dollars at that or any other rate.
- (2) Restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million for 2001, CHF 410 million for 2000 and CHF 183 million for 1999.
- (3) Financial data is presented on a continuing basis, excluding the results of the Agribusiness Division, which was spun-off in 2000. See "Item 4. Information on the Group 4.A. History and Development of the Group".
- (4) Basic and Diluted earnings and cash dividends per share have been adjusted to reflect a forty-for-one share split effective May 7, 2001. The years 2000, 1999 and 1998 have been adjusted to take this split into account, in order to provide per share information on a consistent basis.
- (5) Cash dividends represent cash payments in the applicable year that generally relate to earnings of the previous year. Cash dividends per share represent dividends proposed that relate to earnings of the current year.

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Year Ended December 31,

2002 ⁽¹⁾	2002	2001	2000	1999	1998
(\$)	(CHF)	(CHF)	(CHF)	(CHF)	(CHF)

(in millions, except per share data)

BALANCE SHEET DATA

Amounts in accordance with IAS:

Cash, cash equivalents and current marketable securities	12,575	17,605	22,152 ⁽²⁾	20,748 ⁽²⁾	16,328	14,170
Inventories	2,971	4,159	4,112	4,122	6,887	6,695
Other current assets	5,324	7,454	7,912 ⁽²⁾	8,069 ⁽²⁾	11,464	9,088
Long-term assets	24,274	33,984	32,585	25,257	30,848	26,272
Total assets	45,144	63,202	66,761	58,196	65,527	56,225
Trade accounts payable	1,270	1,778	1,809	1,591	1,971	1,537
Other current liabilities	7,024	9,834	12,388 ⁽²⁾	10,049	15,442	13,453
Long-term liabilities and minority interests	8,506	11,908	10,319 ⁽²⁾	9,694	10,898	9,839
Total equity	28,344	39,682	42,245	36,862	37,216	31,396
Total liabilities and equity	45,144	63,202	66,761	58,196	65,527	56,225
Net assets	28,410	39,774	42,349	36,940	37,437	31,590
Outstanding share capital	884	1,237	1,274	1,304	1,313	1,328

Amounts in accordance with US GAAP:

Income statement data

Net income	4,218	5,905	4,703	6,913	5,419	4,955
Basic earnings per share ⁽³⁾⁽⁴⁾	1.74	2.44	1.90	2.74	2.10	1.92
Diluted earnings per share ⁽³⁾⁽⁴⁾	1.71	2.39	1.90	2.74	2.10	1.92

Balance sheet data

Total equity	33,319	46,646	50,747	48,802	50,575	47,823
Total assets	50,501	70,701	75,732	72,077	79,756	73,014

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- (1) The Swiss franc amounts have been translated into US dollars at the rate of CHF 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, US dollars at that or any other rate.
- (2) Restated due to reclassification of the fair value of derivative financial instruments from other current assets to cash, cash equivalents and current marketable securities and from other current liabilities to long term liabilities and minority interests.
- (3) Earnings per share has been adjusted to reflect a forty-for-one share split effective May 7, 2001. 2000, 1999 and 1998 figures have been adjusted to take this split into account, in order to provide earnings per share information on a consistent basis.
- (4) Effective January 1, 2002, goodwill and other indefinite life intangibles are no longer amortized in accordance with US GAAP. For an analysis of reported earnings per share for 2002, 2001 and 2000, see "Item 18. Financial Statements note 31(xi)".

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Cash Dividends per Share

Cash dividends are translated into US dollars at the Reuters Market System Rate on the payment date. Because we pay dividends in Swiss francs, exchange rate fluctuations will affect the US dollar amounts received by holders of ADSs.

Year Earned	Month and Year Paid	Total Dividend ⁽²⁾ per share	Total Dividend ⁽⁴⁾ per ADS
		(CHF)	(\$)
1998	April 1999	0.73	0.40
1999	April 2000	0.80	0.41
2000	April 2001	0.85	0.43
2001	March 2002	0.90	0.54
2002 ⁽¹⁾⁽³⁾	March 2003	0.95	0.68

- (1) If the Swiss franc amount for 2002 is translated into US dollars at the rate of CHF 1.40 to the dollar, the Total Dividend per share and Total dividend per ADS in US dollars would be \$0.68. Such translation should not be construed as representations that the Swiss franc amount represent, or have been or could be converted into, US dollars at that or any other rate.
- (2) 1998, 1999 and 2000 figures have been adjusted for a forty-for-one share split and share-to-ADS ratio change on May 7, 2001.
- (3) Dividend to be proposed at the Annual General Meeting on March 4, 2003.
- (4) 1998 and 1999 figures have been adjusted for a two-for-one split for the ADSs on May 11, 2000.

Exchange Rates

The following table shows, for the years and dates indicated, certain information concerning the rate of exchange of Swiss francs per US dollar based on exchange rate information found on Reuters Market System. The exchange rate in effect on February 18, 2003, as found on Reuters Market System, was CHF 1.37 = \$1.00.

	Year ended December 31,			
	Period End	Average ⁽¹⁾	High	Low
1998	1.37	1.45	1.54	1.29
1999	1.59	1.51	1.60	1.36
2000	1.64	1.69	1.83	1.55
2001	1.68	1.69	1.82	1.58
2002	1.40	1.55	1.72	1.39
September 2002			1.52	1.47
October 2002			1.51	1.47

Year ended December 31,

November 2002	1.49	1.44
December 2002	1.49	1.39
January 2003	1.40	1.35
February 2003 ⁽²⁾	1.37	1.34

(1) Represents the average of the exchange rates on the last day of each full month during the year.

(2) The high and low US dollar/Swiss Franc exchange rate is current as of February 18, 2003.

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3.B Capitalization and Indebtedness

Not applicable.

3.C Reasons for the offer and use of proceeds

Not applicable.

3.D Risk factors

You should carefully consider all of the information set forth in this Form 20-F and the following risk factors which we face and which are faced by our industry. The risks below are not the only ones we face. Additional risks not currently known to us or that we presently deem immaterial may also impair our business operations. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. This Form 20-F also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in these forward-looking statements as a result of certain factors, including the risks we face as described below and elsewhere. See "Forward-Looking Statements."

We face intense competition from new products.

Our products face intense competition from competitors' products. This competition may increase as new products enter the market. In such an event, our competitors' products may be safer or more effective or more effectively marketed and sold than our products. If we fail to maintain our competitive position, this could have a material adverse effect on our business and results of operations.

Our research and development efforts may not succeed.

In order to remain competitive, we must continue to launch new and better products each year. To accomplish this, we commit substantial effort, funds and other resources to research and development, both through our own dedicated resources, and on various collaborations with third parties. Our ongoing investments in new product launches and research and development for future products could produce higher costs without a proportional increase in revenues.

In the pharmaceutical business, the research and development process can take up to 12 years, or even longer, from discovery to commercial product launch. This process is conducted in various stages. During each stage there is a substantial risk that we will not achieve our goals and accordingly we may abandon a product in which we have invested substantial amounts. If we fail to continue developing commercially successful products, this could have a material adverse effect on our business and results of operations.

Our dependence on research and development makes it highly important that we recruit and retain high quality researchers and development specialists. We commit substantial efforts and funds to this purpose. Should we fail in our efforts, this could have a material adverse effect on our business and results of operations.

We face intense competition from lower-cost generic products.

We also face increasing competition from lower-cost generic products after patents on our products expire. Loss of patent protection typically leads to a rapid loss of sales for that product and could affect future results. Patent protection is no longer available in major markets for the active ingredients used in a number of our Pharmaceuticals Division's leading products.

Neoral. Patent protection exists for the *Neoral* micro-emulsion formulation and other cyclosporin formulations through 2009 and beyond in major markets. Despite this protection, generic cyclosporin products competing with *Neoral* have entered the transplantation market segment in

the US, Germany and elsewhere. We have filed patent infringement actions against manufacturers of these generic products. However, despite a finding of infringement and an award of damages against one of these manufacturers in the US, we have so far not succeeded in obtaining an injunction, or a final judgment of damages against any of the manufacturers we have sued.

Aredia. Our patent protection for *Aredia* is limited. Generic versions of *Aredia* were launched in the United States in 2001 and 2002. Generic products in competition with *Aredia* are on sale in Canada and elsewhere. However, in 2002, we launched *Zometa*, our more potent successor product to *Aredia*.

Sandostatin. Basic patent protection for *Sandostatin* has expired in the US and Japan and will expire April 2003 in Germany and the UK, 2006 in France, and 2007 in Italy. However, protection extending to 2010 (2013 and beyond in the United States) continues in major markets for *Sandostatin LAR*, which represents a substantial and growing proportion of our octreotide sales.

Cibacen/Lotensin/Cibadrex. The basic benazepril substance patent for *Cibacen/Lotensin/Cibadrex* expired in Japan in 2002 and will expire in the US in August 2003 (or expected to expire in February 2004 with any six-month pediatric exclusivity) and in 2004-08 in major markets in the EU. However, *Lotrel*, which is a combination of benazepril with amlodipine, is patented in the US until 2017.

Lamisil. *Lamisil* is covered generically by a patent family which will expire in 2004 in the US, March 2003 in Japan and has expired in other major countries. Another patent family covers the product specifically and expires in 2006 in the US, 2004-05 in Japan and 2005-07 in major EU countries. The specific US patent is being challenged by Dr. Reddy Laboratories in the US.

Voltaren. *Voltaren* is off-patent. As a result, revenue from *Voltaren* may decline significantly over the next few years.

Government regulation may adversely affect our business.

We and our competitors are subject to strict government controls on the development, manufacture, marketing, labeling, distribution and pricing of products. We must obtain and maintain regulatory approval for our pharmaceutical and other products from regulatory agencies in order to sell our products in a particular jurisdiction.

Risks regarding the development of new products. Our research and development activities are heavily regulated. If we fail to comply fully with applicable regulations, then there could be a delay in the submission or approval of potential new products for marketing approval. In addition, the submission of an application to a regulatory authority does not guarantee that a license to market the product will be granted. Each authority may impose its own requirements and delay or refuse to grant approval, even when a product has already been approved in another country. In our principal markets, the approval process for a new product is complex, lengthy and expensive. The time taken to obtain approval varies by country but generally takes from six months to several years from the date of application. This registration process increases the cost to us of developing new products and increases the risk that we will not succeed in selling them successfully.

Risks regarding the manufacture of our products. The manufacture of our products is heavily regulated by governmental authorities around the world, including the US FDA. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. A failure to comply fully with such regulations could also lead to a delay in the approval of new products.

Risks regarding the marketing of our products. The marketing of our products is also heavily regulated by governments throughout the world. In many countries, particularly those in Europe, we are prohibited from marketing our products directly to consumers. In the United States, some direct-to-consumer

marketing practices are permitted, but the scope of allowable marketing practices is still significantly limited. Most countries also place restrictions on the manner and scope of permissible marketing to physicians and other health professionals. The effect of such regulations may be to limit the amount of revenue which we may be able to derive from a particular product. In addition, if we fail to comply fully with such regulations then civil or criminal actions could be brought against us.

Risks regarding the pricing of our products. In addition to normal price competition in the marketplace, the prices of our pharmaceutical products are restricted by price controls imposed by governments and health care providers in most countries. Price controls operate differently in different countries and can cause wide variations in prices between markets. Currency fluctuations can aggravate these differences. The existence of price controls can limit the revenues we earn from our products and may have an adverse effect on our business and results of operations.

United States. In the United States, ongoing political debates over prescription drug pricing and Medicare reform could increase pricing pressures. In particular, if Medicare reform results in the provision of outpatient pharmaceutical coverage for beneficiaries, the United States government could use its enormous purchasing power to demand discounts from pharmaceutical companies. This could effectively create price controls on prescription drugs.

Europe. In Europe, our operations are also subject to price and market regulations. Many governments are introducing healthcare reforms in an attempt to curb increasing healthcare costs.

Japan. In Japan, where we also operate, the government generally introduces price cut rounds every other year, during which the government mandates price decreases for specific products.

Regulations favoring generics. In response to rising healthcare costs, many governments and private medical care providers, such as Health Maintenance Organizations (HMOs), have instituted reimbursement schemes that favor the substitution of generic pharmaceuticals for more expensive brand-name pharmaceuticals. In the United States, generic substitution statutes have been enacted by virtually all states and permit or require the dispensing pharmacist to substitute a less expensive generic drug instead of an original branded drug.

As a result, we expect that pressures on pricing and operating results will continue and may increase.

Risks regarding the safety and efficacy of our products. Regulatory agencies may at any time reassess the safety and efficacy of our products based on new scientific knowledge or other factors. Such reassessments could result in the amendment or withdrawal of existing approvals to market our product, which in turn would result in a loss of revenue, and could serve as an inducement to bring lawsuits against us.

Other regulatory risks. Changes in worldwide intellectual property protections and remedies, trade regulations and procedures, as well as unstable governments and legal systems, intergovernmental disputes and possible nationalization could also materially adversely affect our business or results of operations.

We operate in highly competitive and rapidly consolidating industries.

We operate in highly competitive and rapidly consolidating industries. Our principal competitors are major international corporations with substantial resources for research and development, production and marketing. Our competitors are consolidating, and the strength of combined companies could affect our competitive position in all of our business areas.

Product liability claims could adversely affect our business and results of operations.

Potentially, product liability is a significant commercial risk for us. Substantial damage awards have been made in some jurisdictions against pharmaceutical companies based upon claims for injuries allegedly caused by the use of their products. We are involved in a number of product liability cases

claiming damages as a result of the use of our products. While we hold insurance for product liability in reasonable and prudent amounts, it is possible that not all risks may be covered by such insurance. Such insurance is becoming more difficult to obtain and more expensive when it is available. We believe, but do not know with certainty, that any reasonably foreseeable unaccrued costs and liabilities associated with the risks of product liability claims will not have a material adverse effect on our consolidated financial position, results of operations or liquidity.

Patent claims could adversely affect our Generics Business Unit and results of its operations.

We take all reasonable steps to ensure that our products, including the products manufactured and sold by our Generics Business Unit, do not infringe valid third-party intellectual property rights. Nevertheless, originating companies commonly assert patent and other intellectual property rights, in order to delay or prevent generic competition. As a result, we can become involved in extensive litigation regarding our generic products. If we are unsuccessful in defending against these suits, we could be subject to injunctions preventing us from selling our generic products, or to damages, which may be substantial. Either event could have a material adverse effect on our consolidated financial position, results of operations or liquidity. See "Item 4. Information on the Company 4.B. Business Overview Generics Intellectual Property."

Our business will continue to expose us to risks of environmental liabilities.

In our product development programs and manufacturing processes, it is sometimes necessary for us to use hazardous materials, chemicals, viruses and toxic compounds. These programs and processes expose us to risks of accidental contamination, events of noncompliance with environmental laws and regulatory enforcement, personal injury, property damage and claims resulting from these events. If an accident occurred, or if we discover contamination caused by prior operations, we could be liable for cleanup obligations, damages or fines, which could have an adverse effect on our business and results of operations.

The environmental laws of many jurisdictions impose actual and potential obligations on us to remediate contaminated sites. These obligations may relate to sites:

that we currently own or operate;

that we formerly owned or operated; or

where waste from our operations was disposed.

These environmental remediation obligations could significantly reduce our operating results. In particular, our accruals for these obligations may be insufficient if the assumptions underlying the accruals including our assumptions regarding the portion of the waste at a site for which we are responsible prove incorrect, or if we are held responsible for additional contamination.

Stricter environmental, safety and health laws and enforcement policies could result in substantial costs and liabilities to us, and could subject our handling, manufacture, use, reuse or disposal of substances or pollutants to more rigorous scrutiny than is currently the case. Consequently, compliance with these laws could result in significant capital expenditures as well as other costs and liabilities, thereby harming our business and operating results.

The manufacture of our products is technically highly complex, and a supply interruption or delay could adversely affect our business and results of operation.

The products we market, distribute and sell are either manufactured at our own dedicated manufacturing facilities, or through toll manufacturing arrangements or supply agreements with third parties. Since many of our products are the result of technically complex manufacturing processes, and are sometimes dependent on highly specialized raw materials, we can provide no assurances that supply sources will not be interrupted from time to time. In addition, for these same reasons, the volume of

production of any product cannot be rapidly altered. As a result, if we should fail to accurately predict market demand for any of our products then we may not be able to produce enough of the product to meet that demand, or may produce too much of the product, either of which could affect our business and operating results.

Foreign exchange fluctuations may adversely affect our earnings and the value of some of our assets.

Through December 31, 2002, we prepared our consolidated financial statements in Swiss francs. Beginning on January 1, 2003, we will prepare our consolidated financial statements in US dollars. In either case, a significant portion of our earnings and expenditures are in currencies other than our reporting currency. In 2002, 43% of our sales were made in US dollars, 25% in Euro, 8% in Japanese yen, 5% in Swiss francs and 19% in other currencies. In 2002, 32% of our costs were generated in US dollars, 25% in Euro, 21% in Swiss francs, 6% in Japanese yen and 16% in other currencies. Changes in exchange rates between the Swiss franc, the US dollar and these other currencies can result in increases or decreases in our costs and earnings. Fluctuations in exchange rates between the Swiss franc, the US dollar and other currencies may also affect the book value of our assets outside Switzerland and the amount of shareholders' equity. We seek to minimize our currency exposure by engaging in hedging transactions where we deem it appropriate. To mitigate some of these risks, we have hedged certain US dollar and Japanese yen positions for 2003. We cannot predict, however, all changes in currency and interest rates, inflation or other factors, which could affect our international businesses.

Decreases in financial income could affect our earnings.

In recent years, we have earned an attractive level of financial income, net, in a difficult investment environment, due to good currency management and investment strategies. Given the volatile nature of investment markets, there can be no guarantee that such gains will be repeated in the future, or that we can avoid suffering losses from this trading activity.

Changes in accounting rules could affect our reported results.

The International Accounting Standards Board is entering a period of critically examining current International Accounting Standards with a view to increasing international harmonization of accounting rules. This process of amendment and convergence of worldwide accounting rules could result in significant amendments to the existing rules within the next two years in such areas as the timing of recognition of sales and other revenues arising from collaborative agreements with marketing and distribution partners, accounting for share-based compensation, goodwill and intangibles, employee benefit plans, marketable securities and derivative financial instruments and classification of balance sheet positions as debt or equity. It is not possible to predict the impact on our reported results of any such rule changes which may be made in the future, or whether such rule changes would be retrospective, potentially requiring us to restate past reported results.

Changes in tax laws could adversely affect our earnings.

Changes in the tax laws of Switzerland, the United States, or other countries in which we do significant business, as well as changes in our effective tax rate for the fiscal year caused by other factors, could affect our net income. During 2002, no major tax legislation was enacted that would materially impact our net income. It is not possible to predict the impact on our results of any tax legislation which may be enacted in the future.

Changes in global economic conditions could affect our business and results of operations.

Our future results could be effected by changes in the global economy, including the changes in economic conditions which have resulted, and could continue to result from recent terrorist attacks, and any additional terrorist attacks which may occur in the future, as well as from any related military activity around the world.

Item 4. Information on the Company

4.A History and Development of Novartis

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Novartis AG, headquartered in Basel, Switzerland, is a public company incorporated under the laws of Switzerland with an indefinite duration. We were created as a result of the merger of Sandoz AG and CIBA-Geigy AG in December 1996. Prior to the merger, Sandoz AG and CIBA-Geigy AG were each global participants in the pharmaceutical and agrochemical industries. We are domiciled in and are governed by the laws of Switzerland.

Our Group companies employ approximately 73,000 associates worldwide and operate in over 140 countries. Our registered shares are listed in Switzerland on the SWX Swiss Exchange ("SWX") and traded on the European trading platform virt-x, and our American Depositary Shares are listed on the New York Stock Exchange ("NYSE"). Our shares are also traded on the SEAQ International exchange in London. Our registered office is located at Lichtstrasse 35, 4056 Basel and our telephone number is 011-41-61-324-1111. We maintain an Internet website at <http://www.novartis.com>. In the US, Corporation Service Company (2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, telephone: 1-800-927-9800) acts as our agent solely for the purpose of accepting service of process in respect of registration statements on Forms F-3 under the US Securities Act of 1933, as amended.

Major transactions in 2002, 2001 and 2000

On November 29, 2002, our Generics Business Unit acquired 99% of Lek Pharmaceuticals d.d., the Slovenian generics company, for CHF 1.3 billion (approximately US\$929 million) in cash. See "Item 4. Information on the Company 4.B. Business Overview Generics."

On November 29, 2002, our Consumer Health Division divested its Food & Beverage business to Associated British Foods plc, of the United Kingdom, for CHF 402 million (approximately US\$287 million) in cash. See "Item 4. Information on the Company 4.B. Business Overview Medical Nutrition." After the sale of the Food & Beverages business to Associated British Foods plc., the remaining Health Food & Slimming and Sports Nutrition businesses were reorganized as a stand-alone unit, Nutrition & Santé, which for external reporting purposes will be consolidated into our Medical Nutrition Business Unit.

In January 2002, our Animal Health Business Unit acquired two US farm animal vaccine companies, Grand Laboratories Inc., of Iowa, and ImmTech Biologies Inc., of Kansas, for a combined minimum purchase price of CHF 168 million (approximately US\$120 million), of which CHF 133 million (approximately US\$95 million) was settled in Novartis American Depositary Shares. The final price may increase depending on whether certain future sales and other targets are met. See "Item 4. Information on the Company 4.B. Business Overview Animal Health."

On May 5, 2001 we announced the acquisition of 32 million bearer shares of Roche Holding AG, representing 20% of the voting shares of that company for approximately CHF 4.8 billion (approximately US\$2.8 billion). These shares were purchased as a package from BZ Gruppe Holding AG and are intended as a financial investment of a potentially strategic nature. At December 31, 2001 we held 21.3% of the voting shares of Roche Holding AG, which represented an approximate 4% interest in the total Roche equity. During 2002, we increased our investment in Roche by CHF 2.9 billion (approximately US\$2.1 billion) by acquiring a further 11.4% of the company's voting shares. At December 31, 2002, we owned 32.7% of Roche's voting shares, which represents approximately 6.2% of Roche Holding AG's total shares and equity securities.

On December 21, 2000, Novartis Pharmaceuticals completed the acquisition of the antiviral products *Famvir* (famciclovir) and *Vectavir/Denavir* (penciclovir) from SmithKline Beecham, for a total price of CHF 2.7 billion approximately (US\$1.6 billion).

In November 2000, we spun-off and merged our Crop Protection and Seeds businesses with AstraZeneca's Zeneca Agrochemicals to create Syngenta AG ("Syngenta"), which is headquartered in Basel, Switzerland, and is listed on the Swiss, London, New York and Stockholm stock exchanges.

On October 2, 2000, CIBA Vision acquired the stock of Wesley Jessen VisionCare Inc., a US corporation, for CHF 1.3 billion (approximately US\$800 million) in cash.

For a description of our principal capital expenditures and divestitures, see "Item 5. Operating and Financial Review and Prospects 5.B. Liquidity and Capital Resources."

General Corporate Initiatives

We have undertaken a number of initiatives designed to make our management of the Group more transparent to investors and advance our corporate citizenship ideals.

In 2002:

We became the first major pharmaceuticals company to create internal ethical guidelines regarding the use of human stem cells in research, and we established a six-member Ethics Committee, chaired by a Professor of Ethics from the Swiss Federal Institute of Technology, to monitor global compliance with these guidelines;

We introduced three changes to our Articles of Incorporation intended to enhance shareholders' rights: The deadline for submitting agenda items prior to a General Meeting of the shareholders was reduced from 60 to 45 days; shareholders were given the option of conducting electronic voting during the General Meeting; and Directors' terms of office were reduced from four to three years;

We issued Guidelines to our associates to assist them in integrating our Corporate Citizenship Policy into their daily activities.

In the US, together with other leading pharmaceutical companies, we issued the *Together Rx Card* which provides discounts on a broad range of pharmaceuticals from many manufacturers. The total volume of discounts provided by us under the *Together Rx Card* program amounted to about CHF 40 million in 2002.

In 2001:

We created a Board-level committee to develop and implement sound corporate governance principles;

We gave the Board's Audit and Compliance Committee additional responsibility to monitor our compliance with law and policy;

We instituted a new Policy of Corporate Citizenship which sets the framework for our commitment to making corporate citizenship an integral aspect of our business;

We created a patient assistance program to help persons with limited financial means to afford *Gleevec/Glivec*, our innovative oncology medication;

In collaboration with the World Health Organization ("WHO"), we announced a plan to stem the spread of malaria in Africa and other endemic regions in the developing world. As part of a world-wide initiative entitled "Roll Back Malaria," we will provide specially designed packs of *Coartem*, our novel malaria treatment, for distribution through WHO at cost;

We established the Novartis Institute for Tropical Diseases in Singapore to target tropical diseases, including Dengue fever, and infections like tuberculosis;

In the US, we instituted the Novartis *CareCard* program to assist low income elderly to obtain the Novartis medications they need at significant discounts;

We split our shares 40 for 1 so that there is now a 1:1 share-to-ADS ratio.

In 2000:

We rolled out the Novartis Code of Conduct to our employees throughout the world;

We were among the first companies to join the Global Compact, a multilateral initiative of United Nations Secretary General Kofi Annan that is consistent with our own approach to business ethics. The Global Compact formulates nine principles in the areas of environmental protection, respect for the workforce, and human rights.

As part of our commitment to focus not just on our business, but on the business of being a responsible member of the global community, we have continued initiatives like the Novartis Community Partnership Day where all our employees around the world are encouraged, for one day each year, to give time back to the communities in which we operate.

4.B Business Overview

General

We are a world leader both in sales and in innovation in our continuing core businesses: pharmaceuticals and consumer health, which includes generics, OTC self-medication, animal health, medical nutrition, infant and baby foods and products, and eyecare products. We aim to hold a leadership position in all of these businesses. We are committed to improving health and well-being through innovative products and services. The name "Novartis" is derived from the Latin *novae artes*, meaning "new skills," which reflects our focus on research and development.

Product Areas and Geographic Markets

We are organized into two Divisions: Pharmaceuticals and Consumer Health. In 2002, the Consumer Health Division was reorganized to include our Generics, OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition & Santé unit), Infant & Baby and CIBA Vision Business Units. All references to Group figures, unless otherwise indicated, including associates and sales, include the Agribusiness Division up until the November 6, 2000 spin-off. The following tables set forth the Group's sales and operating income by Division or Business Unit for the financial years ended December 31, 2002, 2001 and 2000. Because the Pharmaceuticals Business Units have common long-term economic perspectives, common customers, common research, development, production and distribution practices, and a common regulatory environment, their financial data are not required to be separately disclosed.

	Year Ended December 31,		
	2002	2001 ⁽¹⁾	2000 ⁽¹⁾
	(in CHF millions)		
Sales to third parties			
Pharmaceuticals	21,002	20,181	18,150
Generics	2,809	2,433	1,973
OTC ⁽³⁾	2,359	2,538	2,483
Animal Health	971	962	1,083
Medical Nutrition (including Nutrition & Santé) ⁽³⁾	1,109	1,115	1,136
Infant & Baby ⁽³⁾	2,075	2,227	2,108
CIBA Vision	1,762	1,787	1,392
Consumer Health ongoing	11,085	11,062	10,175
Divested Health & Functional Food activities	325	400	377
Consumer Health	11,410	11,462	10,552

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	Year Ended December 31,		
Sales from continuing activities	32,412	31,643	28,702
Sales from discontinued Agribusiness activities ⁽²⁾			6,693
Group sales	32,412	31,643	35,395
Operating income			
Pharmaceuticals	6,022	5,677	5,401
Generics	406	281	242
OTC ⁽³⁾	374	452	424
Animal Health	144	138	179
Medical Nutrition (including Nutrition & Santé) ⁽³⁾	6	87	66
Infant & Baby ⁽³⁾	355	388	371
CIBA Vision	183	174	100
Consumer Health ongoing	1,468	1,520	1,382
Divested Health & Functional Food activities	216	(7)	8
Consumer Health	1,684	1,513	1,390
Corporate and other income/expense	181	87	(64)
Operating income from continuing activities	7,887	7,277	6,727
Operating income from discontinued Agribusiness activities ⁽²⁾			1,156
Group operating income	7,887	7,277	7,883

- (1) Restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million in 2001 and CHF 410 million in 2000.
- (2) Agribusiness: Crop Protection and Seeds businesses through November 6, 2000, the date of spin-off.
- (3) 2001 and 2000 figures were previously reported as a single Business Unit under Consumer Health. They are now separated into OTC, Medical Nutrition (including Nutrition & Santé) and Infant & Baby Business Units.

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The table below sets forth a regional breakdown of certain data for the years ended December 31, 2002, 2001 and 2000.

	Americas			Europe			Asia/Africa/Australia		
	2002	2001	2000	2002	2001	2000	2002	2001	2000
Sales (CHF m) ⁽¹⁾	16,407	16,303	17,400	10,602	10,107	11,686	5,403	5,233	6,309
Operating income (CHF m)	1,483	2,240	2,570	5,927	4,473	4,377	477	564	936
Number of employees (at December 31)	28,328	27,303	27,063	32,595	31,386	28,815	11,954	12,427	11,775

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	Americas			Europe			Asia/Africa/Australia		
Investment in tangible fixed assets (CHF m)	836	723	475	774	560	790	51	68	88
Depreciation of tangible fixed assets (CHF m)	(308)	(311)	(388)	(553)	(561)	(715)	(60)	(67)	(86)
Net operating assets (CHF m) ⁽²⁾	8,858	10,216	9,400	19,776	17,071	11,574	1,354	1,587	1,372

(1) 2001 and 2000 figures have been restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million in 2001 and CHF 410 million in 2000.

(2) 2001 and 2000 figures have been restated due to reclassification of the fair value of derivative financial instruments from other current assets to cash, cash equivalents and current marketable securities and from other current liabilities to long term liabilities and minority interests.

PHARMACEUTICALS

The business of our Pharmaceuticals Division is conducted by a number of affiliated companies throughout the world. We are a world leader in the discovery, development, manufacture and marketing of prescription medicines. Our goal is to provide a broad portfolio of effective and safe products to patients through healthcare professionals around the world. This goal is supported by approximately 80 affiliates marketing our products in more than 140 countries. In 2002, the affiliated companies of our Pharmaceuticals Division employed 44,110 associates and had CHF 21.0 billion in sales, which represented 65% of the Group's sales.

Our product portfolio includes a wide range of products in seven major disease areas: (i) cardiovascular/metabolism/endocrinology; (ii) oncology/hematology; (iii) central nervous system; (iv) transplantation/immunology; (v) respiratory/dermatology; (vi) rheumatology/bone/hormone replacement therapy/gastrointestinal and (vii) ophthalmics. Effective January 1, 2001, Novartis Pharmaceuticals took over responsibility for operating the ophthalmic pharmaceutical business previously managed by CIBA Vision. Our Pharmaceuticals Division is organized into five Business Units: Primary Care, Oncology, Transplantation, Ophthalmics and Mature Products. The Business Units coordinate the worldwide research, distribution, marketing and sales of the products assigned to each. Because the Business Units of the Pharmaceuticals Division have common long-term economic perspectives, common customers, common research, development, production and distribution practices, and a common regulatory environment, their financial data are not required to be separately disclosed.

The current product portfolio includes more than 30 key marketed products, of which four were launched in 2002. In addition, the portfolio includes more than 60 potential products or potential additional indications for existing products in various stages of development. See "Research and Development."

Key Marketed Products

The following table describes the key marketed products of our Pharmaceuticals Division, in alphabetical order, by therapeutic area.

Therapeutic area	Project/Compound	Generic name	Indication	Formulation
Cardiovascular, metabolism and endocrinology	<i>Cibacen/Lotensin</i>	benazepril	Hypertension	Coated tablet
	<i>Cibadrex/Lotensin HCT</i>	benazepril + HCT	Hypertension	Coated tablet
	<i>Co-Diovan/Diovan HCT</i>	valsartan + HCT	Hypertension	Film-coated tablet

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	<i>Diovan</i>	valsartan	Hypertension Congestive Heart Failure	Capsule, film-coated tablet
	<i>Lescol/ Lescol XL</i>	fluvastatin	Primary and mixed hypercholesterolemia Slowing the progression of atherosclerosis Increase of high-density lipoprotein cholesterol (HDL-C)	Capsule
	<i>Lotrel</i>	benazepril & amlodipine	Hypertension	Capsule
	<i>Starlix</i>	nateglinide	Type-II diabetes	Tablet
Oncology and hematology	<i>Aredia</i>	pamidronate	Hypercalcemia of malignancy Bone metastases (breast and myeloma) Paget's disease of bone	Vial
	<i>Femara</i>	letrozole	Advanced breast cancer	Coated tablet
	<i>Gleevec/Glivec</i>	imatinib mesylate/imatinib	Chronic Myeloid Leukemia Gastrointestinal Stromal Tumors	Capsule
	<i>Sandostatin LAR/ Sandostatin SC</i>	octreotide	Acromegaly Symptoms associated with functional gastroenteropancreatic endocrine tumors	Vial, ampoule
	<i>Zometa</i>	zoledronic acid	Hypercalcaemia of malignancy Bone metastases (broad range of tumors) Prevention of skeletal-related events in patients with bone malignancies	Vial
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Central nervous system	<i>Comtan</i>	entacapone	Parkinson's disease	Coated tablet
	<i>Exelon</i>	rivastigmine	Alzheimer's disease	Capsule, oral solution
	<i>Focalin</i>	dexmethylphenidate	Attention-deficit hyperactivity disorder	Tablet
	<i>Leponex/Clozaril</i>	clozapine	Treatment-resistant schizophrenia Treatment of recurrent suicidal behavior in patients with schizophrenia and schizoaffective disorder	Tablet
	<i>Ritalin/ Ritalin LA</i>	methylphenidate	Attention-deficit hyperactivity disorder	Tablet, capsule
	<i>Tegretol</i>	carbamazepine	Epilepsy, acute and bipolar affective disorders	Tablet, chewable tablet, syrup,

				suppository
	<i>Trileptal</i>	oxcarbazepine	Epilepsy	Tablet, oral suspension
Transplantation	<i>Neoral/ Sandimmun</i>	cyclosporine	Prevention of graft rejection following organ and bone marrow transplantation Severe Psoriasis Rheumatoid arthritis	Capsule, oral solution, concentrate for intravenous infusion
	<i>Simulect</i>	basiliximab	Acute organ rejection in de novo renal transplantation	Vial
Respiratory and dermatology	<i>Elidel</i>	pimecrolimus cream	Atopic dermatitis (eczema)	Cream
	<i>Famvir</i>	famciclovir	Acute herpes zoster Genital herpes Herpes simplex infections in immunocompromised patients	Tablet
	<i>Foradil⁽¹⁾</i>	formoterol	Asthma Chronic obstructive pulmonary disease	Inhalation capsule (aerosol)
	<i>Lamisil</i>	terbinafine	Fungal infections of the skin and nails	Tablet, cream, <i>DermGel</i> , solution, spray

(1)

During the fourth quarter of 2002, we licensed the exclusive US distribution and marketing rights of *Foradil* to Schering-Plough Corporation. We continue to market and distribute *Foradil* outside of the US, where the brand has achieved broad acceptance amongst specialists and general practitioners. Our commitment to developing a global respiratory business through research, development and marketing remains a strategic priority.

Therapeutic area	Project/ Compound	Generic name	Indication	Formulation
Rheumatology, bone, hormone replacement therapy and gastrointestinal	<i>Estalis</i>	estradiol norethisterone acetate	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch
	<i>Estraderm TTS/ Estraderm MX</i>	estradiol	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch
	<i>Estradot</i>	estradiol	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch
	<i>Estragest TTS</i>	estradiol norethisterone acetate	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch

	<i>Miacalcic</i>	salmon calcitonin	Osteoporosis Paget's disease Hypercalcemia	Nasal spray, ampoule, vial
	<i>Voltaren</i>	diclofenac	Inflammatory forms of rheumatism Pain management	Coated tablet, drop, ampoule, suppository, gel
	<i>Zelnorm/Zelmac</i>	tegaserod maleate/ tegaserod	Irritable Bowel Syndrome with constipation	Tablet
Ophthalmics	<i>Rescula</i>	unoprostone isopropyl 0.15%	Glaucoma	Eye drop
	<i>Visudyne</i>	verteporfin	Wet form of age-related macular degeneration	Vial, activated by laser light
	<i>Zaditen/Zaditor</i>	ketotifen	Allergic conjunctivitis	Eye drop

Not all products are registered in all markets for the treatment areas described above.

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Compounds in Development

The following table describes our most important compounds presently under development. "Filed" means that product registration documents have been filed with the US Food and Drug Administration ("FDA"), with regulatory authorities in the European Union (by either the centralized or mutual recognition procedure), and/or with national health authorities in Europe, but not necessarily in all jurisdictions.

Therapeutic area	Project/ Compound	Generic name	Indication	Estimated Filing Date/Current Phase ⁽¹⁾
Cardiovascular, metabolism and endocrinology	<i>Co-Diovan</i> (high doses)	valsartan/ hydrochlorthiazide	Hypertension	US Approved, EU Filed
	<i>Lescol</i>	fluvastatin sodium	Secondary prevention of cardiovascular events	US/EU Filed
	<i>Lotrel 5-40 and 10-40</i>	amlodipine + benazepril	Hypertension	US Filed
	<i>Starlix/ thiazolidinedione</i>	nateglinide + thiazolidinedione	Type-II diabetes	US Filed
	<i>Diovan</i>	valsartan	Congestive heart failure Post-myocardial infarction (VALIANT) Pre-myocardial infarction (VALUE)	US Approved, EU 2003/III 2004/III 2005/III
	<i>Sandostatin LAR</i>	octreotide acetate	High-risk HTN Diabetic retinopathy, other indications	2004/III

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<i>Starlix/Diovan</i>	nateglinide + valsartan	Prevention of onset of Type-II diabetes/cardiovascular morbidity & mortality	>2005/III
LAF237	To be determined ("TBD")	Type-II diabetes	2005/II
NKS104	pitavastatin	Dyslipidemia	2005/II
SPP100 ⁽²⁾	TBD	Hypertension	2005/II

(1) Phase I: Clinical trials in healthy volunteers to determine safety and tolerability. Phase II: Clinical trials in patients to determine dose ranging, safety and efficacy. Phase III: Large clinical trials to determine definitive safety and efficacy in patients.

(2) This compound was out-licensed to Speedel for development with a callback option, which we exercised in June 2002.

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Therapeutic area	Project/Compound	Generic name	Indication	Estimated Filing Date/Current Phase ⁽¹⁾
Oncology and hematology	<i>Gleevec/Glivec</i>	imatinib mesylate/ imatinib	Tablet dosage form GIST tumors Solid tumors	US/EU Filed Japan Filed Filing date TBD/II
	<i>Zometa</i>	zoledronate	Hypercalcemia of malignancy Bone metastases prevention	Japan Filed 2005/III
	ICL670	TBD	Chronic iron overload	2004/III
	<i>Femara</i>	letrozole	Breast cancer (adjuvant therapy)	2005/III
	PTK787	vatalanib	Solid tumors	2005/III
	EPO906	epothillone B	Solid tumors	2004/II
	<i>OctreoTher</i>	edotreotide	Somatostatin receptor positive tumors	2004/II
	PKC412	midostaurin	Acute Myeloid Leukemia	>2005/II
	RAD001	everolimus	Solid tumors	>2005/II
	SOM230	TBD	Acromegaly/GEP neuroendocrine tumors	>2005/II

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	LAQ824	TBD	Solid tumors	>2005/I
	XAA296	TBD	Solid tumors	>2005/I
Central nervous system	<i>Clozaril</i>	clozapine	Prevention of suicidal behavior	US Approved, EU Filed
	Entacapone triple combination (ECL200)	levodopa/carbidopa/entacapone	Parkinson's disease	US/EU Filed
	<i>Ritalin LA</i>	methylphenidate	Attention deficit disorders	US Approved/ EU Filed
	<i>Trileptal NP</i>	oxcarbazepine	Neuropathic pain	2004/III
	<i>Exelon</i>	rivestigmine	Non-Alzheimer's dementia	>2005/III
	ILO522	iloperidone	Schizophrenia	TBD/III
	<i>Exelon TDS</i>	rivestigmine	Alzheimer's disease	>2005/II
	AMP397	TBD	Epilepsy	>2005/II
	TCH346	TBD	Parkinson's disease, amyotrophic lateral sclerosis	2005/II
	AAG561	TBD	Anxiety/depression	>2005/I

(1) Phase I: Clinical trials in healthy volunteers to determine safety and tolerability. Phase II: Clinical trials in patients to determine dose ranging, safety and efficacy. Phase III: Large clinical trials to determine definitive safety and efficacy in patients.

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Therapeutic area	Project/Compound	Generic name	Indication	Estimated Filing Date/Current Phase ⁽¹⁾
Transplantation, immunology	<i>Certican</i>	everolimus	Transplantation	US/EU Filed
	<i>Myfortic</i>	mycophenolate sodium	Transplantation	US 2003/III, EU Filed
	FTY720	TBD	Transplantation	2005/II
Respiratory and dermatology	<i>Foradil</i>	formoterol	Multi dose dry powder inhaler in asthma "On demand" use	US/EU Filed >2005/III

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<i>Xolair</i>	omalizumab	Asthma/prevention of seasonal allergic rhinitis	US Filed, EU 2003/III
<i>Lamisil</i>	terbinafine	Tinea capitis	2004/III
<i>Elidel</i> Ointment	pimecrolimus	Inflammatory skin diseases	2004/II
<i>Elidel</i> oral	pimecrolimus oral	Inflammatory skin diseases	2005/II
QAB149	TBD	Asthma, chronic obstructive pulmonary disease	>2005/II
<i>Elidel</i>	pimecrolimus	Asthma	>2005/II
Rheumatology, bone, hormone replacement therapy, and gastrointestinal	lumiracoxib	Osteoarthritis, pain	US/EU Filed
		New Formulations (oral suspension; parenteral)	2005/I
<i>Zelnorm/Zelmac</i>	tegaserod maleate/tegaserod	Chronic constipation	2003/III
		Irritable bowel syndrome	US Approved, EU 2004/III
		Functional dyspepsia	2004/III
		Gastroesophageal reflux disease	2005/II
Zoledronic acid (ZOL446)	zoledronate acid	Paget's disease	2005/III
		Post-menopausal osteoporosis	>2005/III
		Rheumatoid arthritis	>2005/II
AAE581	TBD	Osteoporosis	>2005/II
RAD001	everolimus	Rheumatoid arthritis	>2005/II
SMC021	calcitonin	Osteoporosis	>2005/II
SAB378	TBD	Chronic pain	>2005/I

(1)

Phase I: Clinical trials in healthy volunteers to determine safety and tolerability. Phase II: Clinical trials in patients to determine dose ranging, safety and efficacy. Phase III: Large clinical trials to determine definitive safety and efficacy in patients.

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Therapeutic area	Project/Compound			Estimated Filing Date/Phase ⁽¹⁾
Ophthalmics	<i>Rescula</i>	unoprostone isopropyl	Glaucoma	EU Filed
	<i>Visudyne</i>	verteporfin	Age-related macular degeneration (classic)	Japan Filed
			Age-related macular degeneration (occult)	2005/III
			Age-related macular degeneration (minimally classic)	>2005/II
	AFU057A	TBD	Glaucoma	>2005/II
	ABJ409A	TBD	Glaucoma	>2005/II
	<i>Elidel</i>	pimecrolimus	Dry Eye	>2005/II

(1)

Phase I: Clinical trials in healthy volunteers to determine safety and tolerability. Phase II: Clinical trials in patients to determine dose ranging, safety and efficacy. Phase III: Large clinical trials to determine definitive safety and efficacy in patients.

The tables shown above and the summary that follows describe each of our Pharmaceuticals Division's seven key therapeutic areas. Unless otherwise indicated, and subject to required regulatory approvals and, in certain instances, contractual limitations, our intention is to sell the key marketed products throughout the world. These same compounds are in various stages of development throughout the world. For some compounds, the development process is ahead in the United States, for other compounds, development is behind in the United States. Due to the uncertainties associated with the development process, and due to regulatory restrictions in some countries, including the United States, it may not be possible to obtain registration of compounds in development for any or all of the indications referred to in this Form 20-F.

Cardiovascular/Metabolism/Endocrinology

Our Pharmaceuticals Division markets a wide range of products for the treatment of cardiovascular disease, including products for the treatment of hypertension, hyperlipidemia, angina pectoris and heart failure. Ongoing research is focused on the development of innovative new agents to treat metabolic disorders, such as Type-II diabetes, which are associated with serious cardiovascular events, including peripheral vascular disease, diabetic retinopathy, nephropathy, stroke and myocardial infarction.

Key Marketed Products

Cibacen/Lotensin (benazepril) and *Cibadrex/Lotensin HCT* (benazepril+HCTZ) are ACE-inhibitors indicated for the first-line treatment of hypertension and as adjunct therapy in heart failure.

Diovan (valsartan) and *Co-Diovan/Diovan HCT* (valsartan+HCTZ) are pioneering entrants in the angiotensin II receptor blockers (ARBs) class of antihypertensive agents. The ARBs have proven to be a key growth class of drugs within the antihypertensive market. The fixed combination product, *Co-Diovan*, provides additional antihypertensive efficacy for patients who require a greater reduction in blood pressure than can be achieved with monotherapy. In the US, *Diovan* is approved to treat congestive heart failure in patients who are intolerant of angiotensin-converting-enzyme (ACE) inhibitors. *Diovan* is the first ARB to obtain an indication beyond hypertension.

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Lescol (fluvastatin) is a lipid-lowering agent for the treatment of primary and mixed hyperlipidemia and reduction of atherosclerosis. *Lescol XL* 80 mg is a novel extended-release line extension of the *Lescol* 20 and 40 mg immediate-release capsules. *Lescol XL* effectively treats the entire lipid profile, *i.e.*, LDL, HDL and triglycerides. *Lescol XL* has been successfully introduced in major markets during the years 2000-02.

Lotrel (benazepril-amlodipine) is a fixed combination of the ACE-inhibitor benazepril and a leading calcium antagonist (amlodipine). It is marketed only in the United States.

Starlix (nateglinide) is a pioneering member of a class of drugs for the treatment of patients with Type-II diabetes, also known as adult-onset diabetes. The drug aims to restore the early phase of insulin release which helps control blood glucose levels at mealtime. We licensed the compound from Ajinomoto Co., Ltd. and own marketing rights for the drug worldwide, except for Japan and several other Asian markets.

Compounds in Development

Co-Diovan is a combination product of valsartan and hydrochlorthiazide and is in development for hypertension. *Co-Diovan* has been approved by the FDA and a product registration file has been submitted to regulatory authorities in the EU.

Diovan (valsartan) has been approved for congestive heart failure in the US and is in Phase III development for this indication in the EU. *Diovan* is the only ARB to have demonstrated clinical benefits in heart failure in a large scale trial. The product is also in development for post and pre-myocardial infarction (Phase III), and high-risk hypertension (Phase III).

Lescol (fluvastatin sodium) is in development for the secondary prevention of cardiovascular events, based on the LIPS trial (*Lescol* Intervention Prevention Study). Product registration files for this additional indication have been filed in the US and the EU.

Lotrel (benazepril & amlodipine) has two new dosages under development for hypertension (*Lotrel* 5-40 and *Lotrel* 10-40). A product registration file for these additional dosages has been submitted to the FDA in the US and will be submitted to regulatory authorities in the EU in 2003.

Starlix (nateglinide) is currently under development in fixed combination with thiazolidinedione for patients with Type-II diabetes mellitus inadequately controlled with nateglinide monotherapy and diet. A product registration file for this combination has been submitted to the FDA in the US.

Sandostatin LAR (octreotide acetate) is in development for diabetic retinopathy (Phase III). This condition affects approximately 15% of patients with diabetes and is one of the leading causes of blindness in people of working age. Currently there are no effective drugs available to treat diabetic retinopathy.

Starlix (nateglinide) is currently being investigated in combination with *Diovan*. In the NAVIGATOR (Nateglinide and Valsartan in Impaired Glucose Tolerance and Outcomes Research) trial, initiated in November 2001, 9,150 patients aged 50 years or older are being treated with *Diovan* and/or *Starlix* to examine the effect on progression from Impaired Glucose Tolerance to Type-II diabetes after 3 years, as well as on cardiovascular morbidity and mortality in this high-risk patient population. Results on the cardiovascular endpoint are expected to be available in 2007.

LAF237 is a DPP-IV inhibitor in Phase II development for the treatment of Type-II diabetes. Blocking the action of the enzyme DPP-IV has been shown to improve glycemic control by increasing GLP-1 levels (a peptide that augments glucose-induced insulin secretion and also affects other aspects of glycemic control). Phase I studies have shown that once-a-day dosing maintains DPP-IV activity below the levels believed to be needed to increase GLP-1 activity sufficiently for a therapeutic effect.

NKS104 (pitavastatin) is a lipid-lowering agent, in development for the treatment of dyslipidemia. We acquired European marketing rights to pitavastatin in 2001. Clinical trials to date have shown that NKS104 lowers LDL cholesterol and triglycerides while increasing HDL cholesterol levels. The compound is in Phase II.

SPP100 is an orally effective renin inhibitor being developed for the treatment of hypertension and other cardiovascular indications. Blood pressure lowering effects have been demonstrated in Phase II trials, with no significant adverse events observed. The compound was out-licensed to Speedel, but we exercised a call-back option in June 2002. As a result, we have global rights to develop and commercialize this compound.

Starlix (nateglinide)/metformin has been terminated.

Oncology and Hematology

The Oncology and Hematology disease area is a rapidly growing and increasingly important specialty segment. We market products for the treatment of a number of different cancers and for cancer complications, including advanced malignancies involving bone. Research and development in this disease area is aimed at the discovery and development of innovative approaches to the treatment of cancer, focusing in particular on the major forms of solid tumors (breast, prostate, lung, colorectal and ovarian cancer), which account for approximately 50% of all deaths from cancer. In addition, compounds are being developed for the treatment of other forms of oncologic and hematologic conditions.

Recently Launched Products

Zometa (zoledronate) is a more potent bisphosphonate than *Aredia*, with efficacy across a broad range of tumor types. It is administered as a 4 mg infusion over 15 minutes. In 2002, *Zometa* received approval in most key markets for prevention of skeletal related events in patients with advanced malignancies involving bone. These tumor types include prostate cancer, breast cancer, lung cancer, and multiple myeloma.

Key Marketed Products

Aredia (pamidronate) is a therapy for tumor-induced hypercalcemia, osteolysis from multiple myeloma and bone metastases from breast cancer. Our patent protection for *Aredia* is limited. Generic versions of *Aredia* were launched in the United States in 2001 and 2002. Generic products in competition with *Aredia* are also on sale in Canada and elsewhere.

Femara (letrozole) is an oral aromatase inhibitor for the treatment of advanced breast cancer in women with natural or artificially induced post-menopausal status. It recently received approval for first-line therapy in major markets, based upon superior efficacy over the most widely used previous standard therapy, tamoxifen. It also is being developed for adjuvant therapy of breast cancer.

Gleevec/Glivec (imatinib mesylate/imatinib) is a signal transduction inhibitor, which in 2002 gained approval in the US and EU for the treatment of certain forms of gastrointestinal stromal tumors (GIST). This is the second form of cancer which this drug has been approved to treat. *Gleevec/Glivec* was originally approved in 2001 for the treatment of patients with chronic myeloid leukemia (CML) in the blast crisis, accelerated phase or in chronic phase after failure of interferon-alpha therapy. The CML indication was expanded by the FDA (in December 2002) and the EU (in January 2003) to permit *Gleevec/Glivec* to be used to treat newly diagnosed patients with CML. *Gleevec/Glivec* is being studied as a potential treatment of solid tumors in other forms of cancer, primarily as part of a combination therapy.

Sandostatin (octreotide) is a synthetic octapeptide derivative of the hormone somatostatin indicated for the treatment of pancreatic and gastrointestinal endocrine tumors, acromegaly, and acute variceal bleeding. Patent protection or regulatory exclusivity will expire in the next five years

in major markets for this product. The basic octreotide substance patents expired in 2002 in the United States and Japan, and will expire in April 2003 in the UK and Germany, in 2006 in France, and in 2007 in Italy. However, protection extending to 2010 (and 2013 and beyond in the United States) continues in major markets for *Sandostatin LAR*, which represents a significant and growing proportion of our octreotide sales.

Sandostatin LAR/Sandostatin SC (octreotide) is a long-acting release formulation (once every 28 days) approved for the control of symptoms such as the severe diarrhea and flushing associated with metastatic carcinoid tumors, and the severe diarrhea associated with vasoactive intestinal polypeptide secreting tumors. It also is indicated for the treatment of acromegaly.

Compounds in Development

Gleevec/Glivec (imatinib mesylate/imatinib) is being studied as part of potential combination therapies against several solid tumors as a basis for widening the range of indications to include other types of cancers. Phase II trials are in progress. In January 2003, a product registration file was submitted to regulatory authorities in Japan for the treatment of GIST tumors, an indication which was approved in the US and EU in 2002. A product registration file has been submitted to regulatory authorities in the US and EU to manufacture this product in a tablet form, rather than in its current capsule form.

Zometa (zoledronate) is in Phase II development for the prevention of bone metastases. A product registration file has been submitted to regulatory authorities in Japan for the treatment of hypercalcemia of malignancy, an indication which was approved in the US and EU in 2001.

ICL670 is an iron chelator currently in Phase III clinical development. It was designed to enhance patient acceptance of such treatment. Iron accumulation resulting from red blood cell lysis can lead to organ damage and, ultimately, death. ICL670 has been shown preclinically to efficiently induce iron excretion. Bioavailability has been demonstrated orally. Recently published clinical data (American Society of Hematology 2001) demonstrate clinical effectiveness of ICL670 in achieving negative iron balance. The goal is to make iron chelation therapy more practical for patients with chronic iron overload.

Femara (letrozole) is in Phase III development for adjuvant therapy in the treatment of breast cancer.

PTK787 (vatalanib) is a new chemical entity with a novel mechanism of action, which inhibits tumor growth and the development of metastases through inhibition of tumor vascularization. It is expected to be biologically effective as an oral anti-angiogenic agent, in particular in combination with standard therapies against a broad range of tumor types. No significant toxicities are expected at efficacious doses that would preclude chronic administration. PTK787 is in Phase III development, and has shown no significant toxicity to date. The compound is being developed in collaboration with Schering AG of Germany.

EPO906 (epothilone B), a novel tubulin polymerizing compound, is a cytotoxic with a similar mechanism of action as Taxol® (paclitaxel). The taxane segment is the largest cytotoxic market segment in oncology. Preclinically, epothilone B has shown more potency than paclitaxel and more activity in paclitaxel resistant tumors. Responses have been observed in Phase I in several solid tumors and it is now in Phase II clinical development. Dose limiting toxicity is diarrhea. Significant myelosuppression has not been reported to date.

OctreoTher is a peptide hormone analog that carries a radioactive element specifically to somatostatin receptor positive malignant cells and is in Phase II trials for the treatment of solid tumors.

PKC412 (midostaurin) is a protein kinase inhibitor and is in development for the treatment of acute myeloid leukemia. PKC412 is currently in Phase II.

RAD001 is an mTOR pathway inhibitor and is in Phase II development for the treatment of solid tumors. RAD001 is an orally available rapamycin derivative. Experiments have shown it to possess antiproliferative properties in a wide range of tumor models through its inhibition of the mTOR protein kinase. This makes it an attractive candidate for a broad range of cancer indications both as a single agent, and as part of combination therapies.

SOM230 is a somastatin analog with a higher receptor affinity to sst 1, 2, 3 and 5 than currently marketed products. In addition, compared to currently available somastatin analogs, the SOM230 in vitro and in vivo data indicates a more effective and selective inhibition of GH secretion, and thus a unique hormone inhibitory profile. It provides longer lasting IGF-1 suppression across species and a longer half life of (t1/2) 23 hours. SOM230 Phase II trials in acromegaly and GEP tumors were initiated in 2002.

LAQ824 is a histone deacetylase inhibitor in Phase I development for the treatment of solid tumors.

XAA296 is a microtubule stabilizer in Phase I development for the treatment of solid tumors.

PKI166 was terminated.

Central Nervous System

Novartis Pharmaceuticals markets a broad range of central nervous system products, including agents to treat patients with schizophrenia, epilepsy, Parkinson's disease, Alzheimer's disease, and attention deficit hyperactivity disorder. Ongoing research to extend the current product portfolio in this disease area includes projects in psychiatric disease (psychoses, depression, and anxiety), neurological disorders (epilepsy, Parkinson's disease, and Alzheimer's disease), learning disorders and chronic pain.

Recently Launched Products

Ritalin LA (methylphenidate) has been approved in the United States for the treatment of attention-deficit hyperactivity disorder (ADHD). *Ritalin LA* is a once-daily formulation of *Ritalin* (methylphenidate HCl) which eliminates the need for a mid-day dose during school. *Ritalin LA* uses SODAS technology, a proprietary drug delivery technology of Elan Corporation, plc. We have also submitted a product registration file for this product to regulatory authorities in the EU for this condition.

Key Marketed Products

Comtan (entacapone) treats Parkinson's disease by enhancing the action of levodopa, the standard therapy for Parkinson's disease. The compound is licensed from Orion Pharma of Finland.

Exelon (rivastigmine) is a therapy for the treatment of patients with mild to moderate Alzheimer's disease. *Exelon* has been approved in all major markets, including the 15 member-states of the EU and the United States.

Focalin (dexamethylphenidate) is the single isomer version of methylphenidate and is approved in the United States for the treatment of ADHD. This compound is licensed from Celgene Corporation.

Leponex/Clozaril (clozapine) is a neuroleptic agent used in treatment-resistant schizophrenia and is experiencing competition from generic competitors in many markets, including the United States.

Tegretol (carbamazepine) was launched in 1963 for the treatment of epileptic seizures and remains a mainstay in the treatment of that disorder.

Trileptal (oxcarbazepine) is an anti-epileptic drug for the treatment of partial seizures as adjunctive or monotherapy in adults, or as adjunctive therapy in children.

Compounds in Development

Clozaril (clozapine) has been approved by the FDA for the additional indication of the prevention of suicide behavior in patients suffering from schizophrenia and schizoaffective disorder. A product registration file has also been submitted to regulatory authorities in the EU for this indication.

Entacapone Triple Combination (ECL200 Entacapone/Levodopa/Carbidopa) product registration files have been submitted to regulatory authorities in the US and EU for the treatment of Parkinson's Disease.

Trileptal NP (oxcarbazepine) is in Phase III development for the treatment of diabetic neuropathic pain.

Exelon (rivastigmine) is in development for additional indications and formulations. *Exelon* is being investigated in Phase III trials for the treatment of non-Alzheimer's dementia. A transdermal formulation, *Exelon TDS*, is in Phase II development for Alzheimer's disease.

ILO522 (iloperidone) is a mixed serotonin/dopamine antagonist for the treatment of schizophrenia and other related psychotic disorders. Iloperidone is licensed from Titan Pharmaceuticals, Inc. and is currently in Phase III clinical trials.

AMP397 is an AMPA receptor antagonist and is in Phase II development for the treatment of epilepsy.

TCH346 is in Phase II development and is targeted as first line intervention for neurodegenerative diseases such as Parkinson's disease, and amyotrophic lateral sclerosis, where it functions to provide neuroprotection and thereby delays further progression of these diseases.

AAG561 is in Phase I development, and could be the first in class among the corticotrophin-releasing factor 1 antagonists, a novel concept in the treatment of depression and anxiety which encompasses huge patient populations. Phase II trials are expected to start during 2003.

Transplantation/Immunology

We are a leader in the development of transplantation medicine, producing widely used products that help to prevent the rejection of organs following transplantation. A wide-ranging research and development program is aimed at developing new compounds and interventions in the area of chronic rejection, tolerance induction, Beta-cell inhibition, ischemia/reperfusion injury to reduce delayed graft function, inhaled therapies for lung transplantation and pancreatic islet transplantation.

Key Marketed Products

Neoral (cyclosporin) builds on the established clinical utility of *Sandimmun* to provide improved primary immunosuppression in organ transplant patients. *Neoral* is formulated as a microemulsion, thereby providing improved absorption and less variability in dosing. Despite our patent protection, generic companies have launched competing

products in the United States and will continue to compete vigorously. Marketing authorizations have also been granted for generic products in Europe and elsewhere. *Neoral* was launched in Japan in 2000, and these sales have partially offset the reduction of sales in the United States and elsewhere.

Sandimmun (cyclosporin) was introduced in 1982 for the prevention of organ rejection among patients with solid organ (kidney, heart, lung and liver) transplants and bone marrow transplantation.

Simulect (basiliximab) is a chimeric monoclonal antibody that suppresses interleukin-driven proliferation of T-cells. *Simulect* is designed to complement *Neoral* in preventing acute rejection episodes in organ transplantation.

Compounds in Development

Certican (everolimus) is a new immunosuppressant being developed for transplantation, and is intended for use in combination with *Neoral* to prevent rejection episodes in patients with kidney, lung, heart and liver transplants. Product registration files for *Certican* have been submitted to regulatory authorities in the US and EU.

Myfortic (mycophenolate sodium) is a new immunosuppressant in development for transplantation. Product registration files have been submitted to regulatory authorities in the EU regarding this compound. Switzerland has granted marketing authorization for the product. *Myfortic* is intended for use in combination with *Neoral* and corticosteroids to prevent rejection episodes in patients with kidney transplants. *Myfortic* is being developed as an advanced enteric coated tablet formulation of mycophenolate.

FTY720 is a novel immunosuppressant being developed for transplantation. The compound currently is at the end of Phase II clinical trials and is planned to be used in combination with *Neoral* or *Certican* to prevent rejection episodes or to enhance graft survival in patients with kidney transplants. FTY720 has a new mechanism of action altering lymphocyte homing. FTY720 is being developed in capsule, oral liquid and injectable formulations. This product has been licensed from Yoshitomi Co., Ltd. of Japan.

Respiratory/Dermatology

Our Dermatology portfolio covers a broad range of indications, with marketed products for the treatment of atopic dermatitis (eczema), fungal infections, psoriasis and wound healing. In addition, ongoing research and development is aimed at developing new compounds and extending the clinical utility of existing compounds in the areas of allergic and inflammatory skin disease, such as contact eczema and psoriasis. There is considerable demand for new dermatology treatments in these areas where current therapies are handicapped by limited efficacy or unacceptable side effects. We are committed to expanding our product range in the important Respiratory disease area. A discovery and development program is aimed at providing improved therapeutic options in the treatment of asthma and chronic obstructive pulmonary disease ("COPD"), which includes chronic bronchitis and emphysema. In addition, we market an oral antiviral agent for the treatment of herpes infections.

Recently Launched Products

Elidel (pimecrolimus cream) is a selective inflammatory cytokine inhibitor used in the treatment of atopic dermatitis (eczema). The compound is a member of a new class of agents the ascomycin macrolactams. *Elidel* is the only non-steroid treatment for atopic dermatitis clinically proven to prevent flare progression and improve disease control versus conventional practice with topical steroids. The non-steroid safety profile makes *Elidel* suitable for all body areas for both children and adults. *Elidel* is now approved in 43 countries globally including the US and 12 EU countries. It has so far been launched in 19 countries, including the US and 8 EU countries.

Key Marketed Products

Lamisil (terbinafine) is used in the treatment of fungal infections of the skin, nails and scalp. *Lamisil* kills the fungus (fungicidal in vitro), rather than simply preventing further fungal growth. An "over-the-counter" formulation is marketed by Novartis Consumer Health in many markets, including the United States.

Foradil (formoterol) is a long-acting bronchodilator indicated for the treatment of asthma and COPD, approved and launched in the United States in 2001. During the fourth quarter of 2002, we licensed the exclusive US distribution and marketing rights of *Foradil* to Schering-Plough Corporation. We continue to market and distribute *Foradil* outside the US, where the brand has achieved broad acceptance amongst specialists and general practitioners. The long-acting bronchodilator is a relatively new addition to the range of treatments for asthma, and is

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distinguished by its rapid onset of action (one to three minutes) and long-lasting effect from a single dose (12 hours). *Foradil* is currently marketed principally in Europe in a single-dose dry powder inhaler (the *Aerolizer*), and in certain markets as a pressurized metered dose inhaler. Our commitment to developing a global respiratory business through research, development and marketing, remains a strategic priority.

Compounds in Development

Foradil (formoterol) product registration files have been submitted to the FDA seeking marketing authorization for the *Foradil Certihaler*, a novel, breath-activated multi-dose dry powder inhaler technology which was developed by, and will be manufactured by affiliates of SkyePharma Plc, and which will give patients confirmation that the full dose of *Foradil* medication has been taken. Product registration files for the *Foradil Certihaler* are also in the process of being filed with regulatory authorities in Europe. We have also signed an agreement with Ivax Corporation for the EU and certain other countries (excluding the US and Japan) to market *Foradil* in the *Airmax* device, a new multi-dose dry powder inhaler developed by Ivax. This device containing *Foradil* is approved in Denmark and we intend to register it through the Mutual Recognition Procedure in other EU countries. (See " Regulation European Union.") In addition, *Foradil* is in Phase III development aimed at extending the clinical utility of *Foradil* by registering the product for use as asthma rescue medication on an as-needed ("prn") basis.

Xolair (omalizumab) is an anti-IgE monoclonal antibody developed to treat allergic disease, irrespective of allergen, by normalizing serum IgE. The drug is being developed in collaboration with Genentech and Tanox for the treatment of allergic asthma and seasonal allergic rhinitis. We have filed product registration files for *Xolair* with the FDA and EMEA. Both have requested that we submit additional information regarding the drug. In response, in December 2002, we made a complete resubmission of our product registration files to FDA, including the additional pre-clinical and clinical data analyses which FDA had requested. In response to the EMEA's request, we are conducting an additional study in patients with severe asthma, and plan to submit the results of that study to EMEA by the end of 2003.

Lamisil (terbinafine) is in Phase III development for tinea capitis.

Elidel (pimecrolimus cream) oral and ointment formulations are also in Phase II development for inflammatory skin diseases. In addition, *Elidel* is in Phase II development for the treatment of asthma.

QAB149 is in Phase II development for the treatment of asthma and COPD. QAB149 is a selective agonist of B2 adreno-receptors. QAB149 is an inhaled long-acting b2-adrenoceptor agonist, with the potential to be the first truly once-daily administered compound from this class. The molecule is a single enantiomer, and is anticipated to have an improved side-effect profile compared to currently prescribed b2-adrenoceptor agonists. Phase II clinical trial results are expected in the second half of 2003.

DNK333 was terminated.

Rheumatology/Bone/Hormone Replacement Therapy/Gastrointestinal

We are a leader in the rheumatology/bone/hormone replacement therapy/gastrointestinal therapeutic area with products intended to treat arthritis, osteoporosis and early menopausal symptoms, such as hot flashes, and prevent the long-term complications of these conditions, which

include cardiovascular disease and osteoporosis resulting from menopausal change. The bone and rheumatology research and development pipeline includes new compounds for the treatment of rheumatoid arthritis, osteoarthritis and bone metabolism disorders, such as osteoporosis. Research and development in hormone replacement therapy is primarily focused on improving the delivery of therapy via transdermal patch technology.

Novartis Pharmaceuticals has recently entered the gastroenterology market with the launch of *Zelnorm/Zelmac* for irritable bowel syndrome with constipation, and with further development efforts regarding the use of *Zelnorm/Zelmac* to treat chronic constipation, functional dyspepsia, gastroesophageal reflux disease (GERD) and other conditions. The gastrointestinal disease area is an increasingly important segment due to the high level of as-yet unmet patient needs with regard to disorders with no identified cause. Research and development in this disease area is aimed at the discovery and development of innovative approaches to the treatment of upper and lower gastrointestinal disorders.

Recently Launched Products

Zelnorm/Zelmac (tegaserod maleate/tegaserod) is a 5-HT₄ partial agonist developed to address the need for a safe and effective treatment of irritable bowel syndrome with constipation, relieving such symptoms as abdominal pain, discomfort, constipation and bloating. The FDA has approved this product for sale in the US, as have the authorities in Switzerland, Mexico, Australia, Venezuela, Argentina, Colombia, the Czech Republic and approximately 35 other nations. In certain countries, including the US, *Zelnorm/Zelmac* is approved for the treatment of women only.

Key Marketed Products

Estalis (estradiol, norethisterone acetate) transdermal patch is a treatment for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. The product is sub-licensed from Aventis, and offers a convenient treatment in a single patch for patients with an intact uterus.

Estraderm TTS and *Estraderm MX* (estradiol) transdermal patches are treatments for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. These are earlier generations of transdermal patches.

Estradot (estradiol) transdermal patch, licensed from Noven Pharmaceuticals, Inc., is a treatment for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. *Estradot* is the smallest estrogen patch available and offers a thin, flexible and discreet hormone therapy.

Estragest TTS (estradiol, norethisterone acetate) transdermal patch is a low-dose treatment for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. *Estragest TTS* offers a high amenorrhea rate in a single patch which is changed twice a week.

Famvir (famciclovir) is used in the treatment of acute herpes zoster and genital herpes, and was acquired in 2000 from SmithKline Beecham. The acquisition included global marketing rights, production rights and all intellectual property rights.

Miacalcic (salmon calcitonin) is a treatment for the prevention of progressive loss of bone mass, mainly in post-menopausal women and in elderly patients, Paget's disease and hypercalcemia. *Miacalcic* is available both in an injectable form and as a nasal spray.

Voltaren (diclofenac) is a non-steroidal anti-inflammatory drug (NSAID) for the treatment of inflammatory and degenerative forms of rheumatism (articular and non-articular), post-operative and post-traumatic pain and acute attacks of gout and migraines. This product faces generic competition. An "over-the-counter" formulation of the topical form of this product is marketed by Novartis Consumer Health in several markets under the name *Voltaren Emulgel*, for the treatment of inflammation of tendons, ligaments, muscles and joints, and for localized forms of soft-tissue and degenerative rheumatism.

Compounds in Development

Prexige (lumiracoxib) is an NSAID that selectively inhibits the COX-2 enzyme. We have submitted Product Registration Files for this product to the FDA and to European regulatory authorities.

The *Prexige* Product Registration Files were accepted for review by the FDA for the indications of osteoarthritis and acute pain, including primary dysmenorrhea. For rheumatoid arthritis, an additional pivotal trial has been started. An additional study, TARGET, is ongoing to investigate long-term gastrointestinal benefits and cardiovascular safety with and without low dose aspirin. Interim study results from TARGET are expected in the second quarter of 2003. New formulations (an oral suspension and a parenteral) of *Prexige* are also in Phase I development. These additional formulations will provide dosing options for those people who can not swallow tablets.

Zelnorm/Zelmac (tegaserod maleate/tegaserod) was approved by the FDA for irritable bowel syndrome with constipation in July 2002. In Europe, the product registration file was withdrawn, and discussions are ongoing with the European Medical Evaluations Agency. During these discussions, the EMEA requested an additional Phase III trial, which is currently ongoing. *Zelnorm/Zelmac* is also in development for chronic constipation (Phase III), functional dyspepsia (Phase II) and gastroesophageal reflux disease (Phase II). A strategic alliance with Bristol-Myers Squibb Company for the co-development and co-promotion of *Zelnorm/Zelmac* was terminated during 2001.

Zoledronic acid (ZOL446 zoledronate acid) is being developed for postmenopausal osteoporosis and Paget's disease. Phase II trials in osteoporosis have shown that zoledronic acid, administered as a once per year 5 mg injection, causes significant increases in bone mineral density. Phase III trials in postmenopausal osteoporosis and Paget's disease are currently in progress.

AAE581 is being developed for the treatment of osteoporosis and is in Phase II. AAE581 is a specific inhibitor of osteoclast-derived cathepsin K, leading to reduced collagen breakdown and osteoclast-mediated bone resorption. The compound represents a novel mode of action and has been shown to effectively suppress biological markers of bone turnover up to 28 days in healthy volunteers, compared to placebo.

RAD001 is being developed for the treatment of rheumatoid arthritis and is in Phase II. RAD001 is an inhibitor of T-cell proliferation. See "Oncology and Hematology Compounds in Development."

SMC021 is a regulator of calcium homeostasis and is in Phase II development for the treatment of osteoporosis. SMC021 is an oral formulation of salmon calcitonin. Calcitonin, a peptide, inhibits bone resorption by acting on specific receptors on osteoclasts. In addition, salmon calcitonin has been shown to have analgesic properties. Injectable and nasal spray calcitonins are currently on the market. SMC021 is a novel concept in oral peptide delivery.

SAB378 is a cannabinoid (CB1) agonist which is in Phase I development. This compound represents a novel concept in treating pain which, on the basis of preclinical results, could be more potent than major current treatments. Results of proof of efficacy studies are expected during 2003.

Ophthalmics

We develop and market products for the treatment of a number of different ophthalmic diseases. Research and development in this disease area is aimed at the discovery and development of innovative approaches to the treatment of glaucoma, age-related macular degeneration, eye inflammation, ocular allergies and other diseases and disorders of the eye.

Key Marketed Products

Visudyne (verteporfin) is a light activated drug (photosensitizer) and is used as a two-step procedure that can be performed in a doctor's office. First, the drug is injected intravenously into the patient's arm. A non-thermal laser light is then shone into the patient's eye to activate the drug. *Visudyne* is commercially available in 68 countries for the treatment of predominantly classic subfoveal choroidal neovascularization (CNV) caused by age-related macular degeneration. It is approved in 24 countries for the treatment of occult subfoveal CNV secondary to AMD (including

the EU which gained approval this year). It is also approved in over 45 countries, including the EU, US and Canada, for the treatment of subfoveal CNV due to pathologic myopia (severe near-sightedness). Further geographic expansion is planned for regions including Japan and China.

Zaditen (ketotifen) is an eye drop which provides fast relief of symptoms in patients suffering from ocular allergy. *Zaditen* works through multiple mechanisms of action to provide relief within minutes and a duration of action of up to 12 hours. *Zaditen* provides rapid relief and long lasting control of allergy symptoms with a twice daily dosing regimen. *Zaditen* is approved in more than 30 countries, including the United States (where it is marketed as *Zaditor*) and the EU.

Rescula (unoprostone isopropyl 0.15%) is an intraocular pressure lowering medication indicated for the treatment of primary open angle glaucoma and/or ocular hypertension. It acts by increasing the outflow of aqueous humor from the anterior chamber of the eye which leads to a reduction of the pressure. It is administered as eye drops twice daily. *Rescula* is approved in more than 40 countries around the world, including the US, and is currently undergoing the Mutual Recognition Procedure for approval in the EU.

Compounds in Development

Visudyne (verteporfin) is in development for additional indications. A Phase III trial is ongoing in occult AMD in the US and Phase II trials are in progress for minimally classic AMD and different regimens for optimizing treatment outcomes.

AFU057A is a 1A-adrenoreceptor antagonist, currently in development for the treatment of glaucoma (Phase II).

ABJ409A is a dopaminergic, currently in development for the treatment of glaucoma (Phase II).

Elidel (pimecrolimus), our Dermatology product, is also currently in development for the treatment of dry eye (Phase II).

PKC412 was terminated.

Principal Markets

The world market for our Pharmaceuticals Division is concentrated in the United States, Europe and Japan. The following table sets forth certain data relating to our principal markets.

Pharmaceuticals	Sales 2002	
	(CHF millions)	(%)
United States	8,914	42
Americas (except the United States)	1,543	7
Europe	6,667	32
Japan	2,259	11
Rest of the World	1,619	8
Total	21,002	100

Many of our Pharmaceuticals Division's products are used for chronic conditions that require patients to consume the product over long periods of time, from months to years. Sales of the vast majority of our products are not subject to material changes in seasonal demand.

Production

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The key goal in our manufacturing and supply chain management program is to ensure the uninterrupted, timely and cost-effective supply of products that meet all product specifications. In order to achieve this objective, we manufacture our prescription medicines at 8 bulk chemical and 18 secondary production facilities. Major bulk chemical sites are located in Basel, Switzerland; Grimsby, United Kingdom; and Ringaskiddy, Ireland. Bulk chemical production involves the manufacture of therapeutically active compounds, mainly by chemical synthesis or by a biological process such as fermentation. Secondary production involves the manufacture of "galenical" forms of drug products such as tablets, capsules, liquids, ampoules, vials and creams. Significant secondary production facilities are located in Stein, Switzerland; Wehr, Germany; Torre, Italy; Barbera, Spain; Suffern, New York, United States; in Sasayama, Japan and in various locations in Europe, including Italy, Spain, Germany, France, the United Kingdom, and Turkey.

During clinical trials, which can last several years, the manufacturing process is rationalized and refined. By the time clinical trials are completed and products are launched, the manufacturing processes have been extensively tested and are considered stable. However, improvements to these manufacturing processes may continue throughout a product's life cycle.

While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages.

Raw materials for the manufacturing process are purchased from a number of third party suppliers. Where possible, our policy is to maintain multiple supply sources so that the business is not dependent on a single or limited number of suppliers. However, our ability to do so may at times be limited by regulatory requirements. We monitor market developments that could have an adverse effect on the supply of essential materials. All raw materials we purchase must comply with our quality standards. Overall, prices are not volatile for materially significant raw materials.

Marketing and Distribution

We have invested significant resources in our sales and marketing organizations to achieve a competitive presence in all of the main pharmaceutical markets worldwide. In particular, Pharmaceuticals Division affiliates have a strong presence in the US and the EU.

Products are sold to wholesale and retail drug distributors, hospitals, clinics, government agencies and managed care providers. In each market, to the extent permitted by law, we deploy sales representatives to market our products and supporting medical staff to provide medical information to prescribers and healthcare purchasers. As of December 31, 2002 Pharmaceuticals Division affiliates had more than 6,000 medical representatives in the US field forces (including contract field forces), and more than 17,000 medical representatives worldwide. Our sales and marketing reach is further extended through various agreements with promotion and marketing partners, licensees, associates and distributors.

Competition

Other companies selling branded prescription pharmaceutical products include Abbott Laboratories, Alcon, Allergan, AstraZeneca, Aventis, Bausch & Lomb, Bayer, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Merck, Pfizer, Pharmacia, Roche, Santen, Schering-Plough and Wyeth. Competition within the pharmaceutical industry is intense and extends across a wide range of commercial activities, including pricing, product characteristics, customer service, sales and marketing, and research and development.

In addition to the other pharmaceutical companies selling patented pharmaceuticals under trademarked brand names, our Pharmaceuticals Division faces an increasing challenge from companies

selling generic forms of our products following the expiry of patent protection. In response to generic challenges that infringe upon our patents and trademarks, we vigorously defend our intellectual property rights. Where we have made meaningful improvements to existing products, we seek to extend the product range with patent-protected value-added line extensions. We also seek to use marketing efforts to increase brand awareness and loyalty toward our products. Ultimately, there is no guarantee that any product, even with patent protection, will remain successful if another company develops a new product offering significant improvements over existing therapies.

Research and Development

We are among the leaders in the pharmaceuticals industry in terms of research and development investment. In 2002, we invested approximately CHF 3.6 billion in Pharmaceuticals Division research and development, which represents 17% of total pharmaceuticals sales. Our

Pharmaceuticals Division invested CHF 3.4 billion and CHF 3.3 billion on research and development in 2001 and 2000 respectively. There are currently more than 60 projects in clinical development. Products expected to be launched in 2003 from our efforts include new indications or formulations for *Gleevec/Glivec*, *Xolair*, *Clozaril*, *Comtan* (Entacapone Triple Combination), *Certican*, *Lescol*, and *Myfortic*.

Development of a new drug is a lengthy process, usually requiring 10 to 12 years from the initial research to bringing a drug to market, including six to eight years from Phase I clinical trials to market. At each of these steps, there is a substantial risk that we will not achieve our goals and accordingly we may be required to abandon a product in which we have made a substantial investment.

Research program

The discovery of new drugs is a complex and challenging process which is split into different phases. These phases provide tools that allow our Research team to manage and benchmark their activities. Milestones are established for each phase of the evaluation process. Candidates only advance to the next stage if defined sets of criteria are met. One of the most important major milestones to occur is when a compound meets our early selection criteria, at which time it is declared an Early Selection Compound (ESC). Once a compound has been declared an ESC, significant resources are spent in preclinical activities to satisfy safety requirements, including toxicology studies. Only those compounds that pass this more comprehensive series of preclinical testing (on average, about one in ten candidates) advance to the development stage of a drug's life-cycle. See " Clinical development program."

The completion of the human genome sequence and advances in technologies and computing are changing the way we are discovering new drugs. Functional genomics at Novartis aims at focusing our discovery efforts on drug targets which are disease-relevant and offer potential for new medicines which prevent or slow the progression of a disease, rather than just treat its symptoms. Genomics research groups are located in Basel, Switzerland, and New Jersey (United States) with further support from the Genomics Institute of the Novartis Research Foundation in San Diego California (United States). In total, these activities are staffed by more than 350 scientific and technical experts. This strong in-house capability is complemented by external collaborations with numerous highly regarded biotech companies and academic groups world-wide. Advances made at Novartis and in the alliances we have with other organizations in combinatorial chemistry, ultra high throughput screening technologies, miniaturization, computational approaches, and robotics and engineering are being incorporated into our new discovery processes in order to maximize their effectiveness. To further optimize research capabilities, Novartis established the Novartis Institutes for BioMedical Research, Inc. (NIBRI) in Cambridge, Massachusetts. This new research facility will initially provide lab and office space for 400 scientists and technology experts. Novartis plans to expand this site, and to create one of the most important research campuses in the world focusing on discovery of new drugs.

Clinical development program

Usually in Phase I clinical trials, a drug is tested with about 20 to 80 normal, healthy volunteers. The tests study the drug's safety profile, including the safe dosage range. The studies also determine how a drug is absorbed, distributed, metabolized and excreted, and the duration of its action. In Phase II clinical trials, the drug is tested in controlled studies of approximately 100 to 300 volunteer patients (*i.e.*, persons with the targeted disease) to assess the drug's effectiveness and safety, and to establish a proper dose. In Phase III clinical trials, the drug is further tested on larger numbers of volunteer patients (in some cases more than 15,000 patients in total) in clinics and hospitals. Physicians monitor volunteer patients closely to determine the drug's efficacy and to identify possible adverse reactions. The vast amount of data that must be collected and evaluated makes clinical testing the most time-consuming and expensive part of new drug development. The next stage in the drug development process is to seek registration for the new drug. See " Regulation."

Initiatives to optimize the discovery and development process

We are working to be more efficient in selecting candidate drugs for development. For example, we are now better able to select the best compounds for development by having senior management focus on development projects at an early stage. Under another initiative, special teams work to develop late stage products more quickly. The goal is to improve the likelihood of therapeutic and commercial success, which should reduce development costs and decrease time to market. In several other initiatives we are improving electronic management of the clinical trial processes, including data capture and transfer, reviewing site management as well as electronic storage and archiving of study data and documents. Overall, these initiatives have reduced clinical trial outsourcing, and have improved data quality and speed of clinical trial reporting, substantially reducing the time between initial research and the introduction of the drug to market.

Alliances and acquisitions

Our Pharmaceuticals Division forms strategic alliances and alliance arrangements with other industry players or academic institutions in order to develop new products, acquire platform technologies and to access new markets. We license in products which complement our current product line and that are appropriate to our business strategy. Disease area strategies have been established to focus on alliances and acquisition

activities for key disease areas/indications that are expected to be growth drivers in the future. Products and compounds we review for in-licensing are selected and evaluated using the same criteria as the ones used for our own internally discovered drugs.

We have long term research undertakings totaling CHF 893 million in the aggregate as of December 31, 2002, including CHF 330 million in milestone payments. We intend to fund these expenditures from internally generated resources.

Regulation

The international pharmaceutical industry is highly regulated. Regulatory authorities around the world administer numerous laws and regulations regarding the testing, approval, manufacturing, importing, labeling and marketing of drugs, and also review the safety and efficacy of pharmaceutical products. Further controls exist on the non-clinical and clinical development of pharmaceutical products in particular. These regulatory requirements are a major factor in determining whether a substance can be developed into a marketable product and the amount of time and expense associated with that development.

World regulatory authorities, especially those in the US, Switzerland, the EU and Japan, have high standards of technical evaluation. The introduction of new pharmaceutical products generally entails a lengthy approval process. Of particular importance is the requirement in all major countries that products be authorized or registered prior to marketing, and that such authorization or registration be subsequently

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maintained. In recent years, the registration process has required increased testing and documentation for clearance of new drugs, with a corresponding increase in the expense of product introduction.

To register a pharmaceutical product, a registration dossier containing evidence establishing the quality, safety and efficacy of the product must be submitted to regulatory authorities. Generally, a therapeutic product must be registered in each country in which it will be sold. In every country, the submission of an application to a regulatory authority does not guarantee that approval to market the product will be granted. Although the criteria for the registration of therapeutic drugs are similar in most countries, the formal structure of the necessary registration documents varies significantly from country to country. It is possible that a drug can be registered and marketed in one country while the registration authority in a neighboring country may, prior to registration, request additional information from the pharmaceutical company or even reject the product. It is also possible that a drug may be approved for different indications in different countries.

The registration process generally takes between six months and several years, depending on the country, the quality of the data submitted, the efficiency of the registration authority's procedures and the nature of the product. Many countries provide for accelerated processing of registration applications for innovative products of particular therapeutic interest. In recent years, intensive efforts have been made among the United States, the EU and Japan to harmonize registration requirements in order to achieve shorter development and registration times for medical products. However, the requirement in many countries to negotiate selling prices or reimbursement levels with government regulators can substantially extend the time until final marketing approval is granted.

The following provides a summary of the regulatory process in the principal markets served by Pharmaceuticals Division affiliates:

United States

In the US, applications for drug registration are submitted to and reviewed by the FDA. The FDA regulates the testing, approval, manufacturing, importing, labeling and marketing of pharmaceutical products intended for commercialization in the US. The FDA also monitors all pharmaceutical products currently on the US market. The pharmaceutical development and registration process is typically intensive, lengthy and rigorous. When a pharmaceutical company has gathered data which it believes sufficiently demonstrates a drug's quality, safety and efficacy, then the company may file a New Drug Application ("NDA") for the drug. The NDA must contain all the scientific information that has been gathered about the drug and typically includes information regarding the clinical experiences of all patients tested in the drug's clinical trials. A supplemental new drug application ("sNDA") must be filed for a line extension of, or new indications for, a previously registered drug.

Once an NDA is submitted, the FDA assigns reviewers from the fields of biopharmaceuticals, chemistry, medicine, microbiology, pharmacology/toxicology, statistics and labeling. After a complete review, these experts then provide written evaluations of the NDA, including a recommendation. These recommendations are consolidated and are used by the FDA in its evaluation of the NDA. Based on that evaluation, FDA then provides to the NDA's sponsor an approval, or an approvable, or non-approvable letter. The approvable and non-approvable letters will state the specific deficiencies in the NDA which need to be addressed. The sponsor must then submit complete responses to the deficiencies in order to restart the review procedure.

Once the FDA has approved an NDA or sNDA, the company can make the new drug available for physicians to prescribe. The drug owner must submit periodic reports to the FDA, including any cases of adverse reactions. For some medications, the FDA requires additional post-approval studies (Phase IV) to evaluate long-term effects or to gather information on the use of the product under special conditions. The FDA also requires compliance with standards relating to good laboratory, clinical and manufacturing practices.

European Union

In the EU, there are two main procedures for application for marketing authorization, namely the Centralized Procedure and the Mutual Recognition Procedure. National authorizations are only possible for products intended for commercialization in a single EU member-state only, or for line extensions to existing national product licenses.

In the Centralized Procedure, applications are made to the European Medical Evaluations Agency ("EMA") for an authorization which is valid across all EU member-states. The Centralized Procedure is mandatory for all biotechnology products and optional for other new chemical compounds or innovative medicinal products. When a pharmaceutical company has gathered data which it believes sufficiently demonstrates a drug's quality, safety and efficacy, then the company may submit an application to the EMA. The EMA then receives and validates the application, and appoints a Rapporteur and Co-Rapporteur to review it. The entire review cycle requires 210 days, although there is a "clock stop" at day 120, which allows for the company to respond to questions set forth in the Rapporteur/Co-Rapporteur's Assessment Report. When the company's complete response is received by the EMA, the clock restarts on day 121. If there are further aspects of the dossier requiring clarification, the EMA will then request an Oral Explanation on day 180, in which the sponsor must appear before the EMA to provide the requested additional information. On day 210, the EMA will then take a vote to approve or not approve the application. The final decision is an EU Community decision and applicable to all Member States.

In the Mutual Recognition Procedure, a first authorization is granted by a single EU member-state. Subsequently, mutual recognition of this first authorization is sought from the remaining EU Member-States or a subset thereof. The Mutual Recognition Procedure, commonly called MRP, requires 90 days. Within this procedure, each Member State reviews the application and can issue objections or requests for additional information. On Day 90, each Member State must be assured that the product is safe, effective and that there are no risks to the public health. Once agreement has been reached, each Member State grants separate marketing authorizations for the product.

After the Marketing Authorizations have been granted, the company must submit periodic safety reports to the EMA (Centralized Procedure) or to the National Health Authorities (Mutual Recognition Procedure). The licenses are renewed on a 5 year basis.

Japan

In Japan, applications for new products are made through the Pharmaceutical and Medical Devices Evaluation Center ("PMDEC"). After a data reliability survey and a Good Clinical Practice inspection are carried out by the Organization for Pharmaceutical Safety and Research, a team evaluation is passed to the Central Pharmaceuticals Affairs Council ("CPAC"), whose special members, committees and executive committees provide a report back to the PMDEC. After a further team evaluation, a report is provided to the Ministry of Health, Labor and Welfare ("MHLW"), which makes a final determination for approval and refers this to the CPAC which then advises the MHLW on final approvability. Drug manufacturing or import license approval is issued by the local prefecture government. Once the MHLW has approved the application, the company can make the new drug available for physicians to prescribe. For some medications, the MHLW requires additional post-approval studies (Phase IV) to evaluate safety, effects and/or to gather information on the use of the product under special conditions. The MHLW also requires the Sponsor to submit safety reports.

Price Controls

In many of the markets where we operate, the prices of pharmaceutical products are subject to direct price controls (by law) and to drug reimbursement programs with varying price control mechanisms. Due to increasing political pressure and governmental budget constraints, we expect these mechanisms to

remain in place and to perhaps even be strengthened and to have a negative influence on the prices we are able to charge for our products.

In the United States, debate over the reform of the healthcare system has resulted in an increased focus on pricing. Although there are currently no government price controls over private sector purchases in the United States, federal legislation requires pharmaceutical manufacturers to pay prescribed rebates on certain drugs to enable them to be eligible for reimbursement under healthcare programs. In the absence of new government regulation, managed care has become a potent force in the US market place that increases downward pressure on the prices of pharmaceutical products. In addition, the current national debate over Medicare reform could influence prices. If Medicare reform results in the provision of outpatient pharmaceutical coverage for beneficiaries, the US government could use its enormous purchasing power to demand additional discounts from pharmaceutical companies thereby creating *de facto* price controls on prescription drugs. On the other hand, Medicare drug reimbursement legislation may increase the volume of pharmaceutical drug purchases and may alleviate the pressure from the uninsured, offsetting, at least in part, potential additional price discounts. With the 2002 elections now completed, it seems more likely that a Medicare Prescription Drug Benefit will be passed in 2003 or 2004.

In the EU, governments influence the price of pharmaceutical products through their control of national healthcare systems that fund a large part of the cost of such products to consumers. The downward pressure on healthcare costs in general in the EU, particularly with regard to prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets (parallel imports) exert commercial pressure on pricing within a country. The expected EU enlargement (with 10 countries expected to join the EU beginning in 2004) will probably complicate the environment and have some influence on prices in the region and parallel trade.

In Japan, the MHLW reviews the prices of individual pharmaceutical products every two years. In the past, these reviews have resulted in price reductions. The Japanese government is currently undertaking a healthcare reform initiative, and the pharmaceutical pricing system is one of the issues being reviewed. In particular, the government is reviewing the pricing of older products, including the biannual reduction of reimbursement prices adjusted for actual discounts given. The government has abandoned the previously proposed reference price system. These efforts on the part of the government may well lead to substantial reforms of the Japanese healthcare system in the near future. Such reforms likely would include additional price control mechanisms, and would place additional pressure on the prices charged for pharmaceutical products.

Intellectual Property

We attach great importance to patents, trademarks, and know-how in order to protect our investment in research and development, manufacturing and marketing. It is our policy to seek the broadest possible protection for significant product developments in all major markets. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen.

The protection offered by such patents extends for varying periods depending on the legal life of patents in the various countries. The protection afforded, which may also vary from country to country, depends upon the type of patent and its scope of coverage. We monitor our competitors and vigorously challenge infringements of our intellectual property.

Patent protection is no longer available in several major markets for the active substances used in a number of our Pharmaceuticals Division's leading products:

Neoral. Patent protection exists for the Neoral micro-emulsion formulation and other cyclosporin formulations through 2009 and beyond in major markets. Despite this protection, generic

cyclosporin products competing with Neoral have entered the transplantation market segment in the US, Germany and elsewhere. We have filed patent infringement actions against manufacturers of these generic products. However, despite a finding of infringement and an award of damages against one of these manufacturers in the US, we have so far not succeeded in obtaining an injunction, or a final judgment of damages against any of the manufacturers we have sued.

Aredia. Our patent protection for *Aredia* is limited. Generic versions of *Aredia* were launched in the US in 2001 and 2002. Generic products in competition with *Aredia* are on sale in Canada and elsewhere. However, in 2002, we launched *Zometa*, our more potent successor product to *Aredia*.

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Sandostatin. Basic patent protection for *Sandostatin* has expired in the US and Japan and will expire April 2003 in Germany and the UK, 2006 in France, and 2007 in Italy. However, protection extending to 2010 (2013 and beyond in the US) continues in major markets for *Sandostatin* LAR, which represents a substantial and growing proportion of our octreotide sales.

Cibacen/Lotensin/Cibadrex. The basic benazepril substance patent for *Cibacen/Lotensin/Cibadrex* expired in Japan in 2002 and will expire in the US in August 2003 (or expected to expire in February 2004 with any six-month pediatric exclusivity) and in 2004-08 in major markets in the EU. However, *Lotrel*, which is a combination of benazepril with amlodipine, is patented in the US until 2017.

Lamisil. *Lamisil* is covered generically by a patent family which will expire in 2004 in the US, March 2003 in Japan and has expired in other major countries. Another patent family covers the product specifically and expires in 2006 in the US, 2004-05 in Japan and 2005-07 in major EU countries. The specific US patent is being challenged by Dr. Reddy Laboratories in the US.

Voltaren. *Voltaren* is off-patent. As a result, revenue from *Voltaren* may decline significantly over the next few years.

The loss of patent protection can have a significant impact on our Pharmaceuticals Division. We work to offset these negative effects by developing and patenting inventions that result in process and product enhancements and by positioning many of our products in specific market niches. However, there can be no assurance that this strategy will be effective in the future to extend competitive advantage, or that we will be able to avoid substantial adverse effects from future patent expirations.

CONSUMER HEALTH

The business of our Consumer Health Division is conducted by a number of affiliated companies throughout the world. In 2002, the Consumer Health Division was reorganized to include our Generics, OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition & Santé unit), Infant & Baby, and our CIBA Vision Business Units. Each Business Unit has a leading market position in its segment by producing and marketing high quality health-related products. In 2002, the affiliates of the Consumer Health Division employed 27,552 associates and had CHF 11.4 billion in sales, which represented 35% of the Group's sales.

In February 2002, we announced our intention to divest our Health and Functional Food business before the end of 2002. This was intended to better meet customer needs and strengthen growth initiatives, furthering our strategic focus on healthcare with pharmaceuticals at the core. In November 2002, we completed the divestment of our Food & Beverage business, including Ovaltine®/Ovomaltine®, Caotina® and Lacovo®, to Associated British Foods plc for EUR 272.5 million (approximately CHF 402 million). In November 2002, we also announced that we were delaying the divestment of the remainder of the Health and Functional Food business due to a lack of attractive offers. These remaining Health and Functional Food businesses the Health Food & Slimming and Sports Nutrition lines have been reorganized into a stand-alone unit called Nutrition & Santé. For reporting purposes, Nutrition & Santé's results will be included in the results of the Medical Nutrition Business Unit. We have announced our intention to sell Nutrition & Santé once an attractive bid is received.

GENERICS

The business of our Generics Business Unit is conducted by a number of affiliated companies throughout the world. We are a world leader in the development, manufacture and marketing of pharmaceutical products and substances which are no longer protected by patents. In January 2003, we announced plans to unite 14 of our Generics company brands under a single global umbrella name, *Sandoz*, to strengthen recognition and leverage share of voice in the highly competitive marketplace for generics products. The initiative capitalizes on the strong reputation of the *Sandoz* name, which still commands a high level of awareness and trust among physicians, pharmacists and patients.

The affiliated companies of our Generics Business Unit compete in three principal product segments: finished dosage forms (the "Generic Pharmaceuticals Business"), active pharmaceutical ingredients and their intermediates (the "Industrial Business") and biopharmaceuticals (the "Biopharmaceuticals Business"). In the Generics Pharmaceuticals Business, we develop and manufacture drugs no longer protected by patents in finished dosage forms, and sell them to pharmacies, hospitals and other healthcare outlets around the world. In the Industrial Business, we manufacture active ingredients for pharmaceutical and biotechnological substances, and their intermediates, and sell them to customers who use them to manufacture finished goods. In developing our new Biopharmaceuticals Business, we are seeking to leverage our technology and

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expertise in manufacturing to develop, manufacture and market high-quality biopharmaceutical products, such as interferones, growth hormones, and insulin, both on behalf of third parties and, as originating biopharmaceutical products lose patent protection, on our own behalf.

As of December 31, 2002, the affiliates comprising our Generics Business Unit employed 7,932 associates. Our Generics products are sold in over 140 countries throughout the world. In 2002, the affiliates comprising Generics had CHF 2.8 billion in sales, which represented 9% of the Novartis Group's total sales.

In 2002, Generics sales grew by approximately 25% in local currencies. The business year was characterized by strongly developing US sales, the acquisition of Lek Pharmaceuticals d.d., the continued integration of recently acquired companies and the successful launch of some generics blockbusters, including the US launch of the generic form of the blockbuster antibiotic Augmentin®, amoxicillin/potassium clavulanate.

In the United States, our Generics sales increased by 50% mainly driven by the launch of amoxicillin/potassium clavulanate in July. This more than made up for the January 2002 expiration of our exclusivity period for the ten milligram capsule formulation of fluoxetine, the generic form of the blockbuster anti-depressant Prozac®.

In Germany, the second most important market for our Generics products, the introduction of new regulations served to limit our sales and the growth in the profitability of our Generics affiliate there. In many other key European markets we achieved excellent performance with strong double digit growth. These markets included the United Kingdom, France, Italy, the Netherlands, Belgium and Austria.

Our key Austrian affiliate, Biochemie GmbH ("Biochemie"), achieved considerable global sales growth in 2002, with good results for products in all three business segments. Biochemie's main growth drivers were amoxicillin/potassium clavulanate, and active ingredients and intermediates for penicillins and cephalosporins.

In November 2002, Novartis Generics acquired Lek Pharmaceuticals d.d., Slovenia's largest pharmaceuticals company. Except where otherwise noted, information in this section does not include information regarding Lek. Only a provisional balance sheet for Lek has been included in our 2002 consolidated financial statements. Lek sales will be consolidated with our sales as of January 1, 2003.

With the acquisition of Lek, Novartis Generics is now a major supplier of generic pharmaceutical products in Central and Eastern Europe and in the former Soviet Union. The Lek group employs approximately 3900 associates. In the first six months of 2002, the Lek group achieved sales of CHF 305 million, operating income of CHF 51 million, and net income of CHF 36 million. Lek manages a wide

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ranging business portfolio, with anti-infectives, cardiovascular and gastrointestinal tract products. Lek also launched a generic version of Augmentin® in the US in 2003. For the time being, Lek products will continue to be sold under that well-regarded name, as agreed between the management of Novartis and Lek.

In 2002, our Industrial Business achieved improved performance in active ingredients (penicillins, cephalosporin and intermediates) as a result of increased penicillin productivity which led to increased sales volumes, a shift to high-value compounds for cephalosporin antibiotics and additional long-term contracts with major pharmaceutical and biotech companies.

Key Marketed Products

Approximately 71% of our Generics sales are derived from our Generic Pharmaceuticals Business, approximately 27% of sales are derived from our Industrial Business and approximately 2% are attributable to the Biopharmaceuticals Business.

Key marketed products include antibiotics (such as penicillins, cephalosporins, macrolides and medicines for the treatment of tuberculosis), central nervous system drugs, cardiovascular drugs, alimentary tract preparations and hormonal tract preparations.

Recently Launched Products

The following is a summary of the most important products launched by us in 2002.

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Loratadine (a generic version of the allergy treatment Claritin®) was launched in the United Kingdom, Netherlands, Norway and Finland in December 2002. In the US, loratadine was approved in January 2003, and we launched the product immediately. For the US launch, Novartis Generics is supporting the over-the-counter launch of this product by Novartis' OTC Business Unit, through a series of supply agreements between affiliates of the two Business Units.

Amoxicillin/potassium clavulanate (a generic version of the antibiotic Augmentin®) was launched in the US by our affiliate Geneva Pharmaceuticals, Inc. in July 2002. Our affiliate Lek launched its own generic version of Augmentin® in the US in January 2003.

Lisinopril hydrochlorothiazide (a generic version of the hypertension, heart failure and acute myocardial infarction treatment Prinivil® and Prinizide®) was launched in the US in July 2002.

Mefloquine (a generic version of the malaria treatment Lariam®) was launched in the US in May 2002.

Omeprazole (a generic version of the a proton-pump inhibitor Losec®) was launched in the Netherlands in April 2002.

Citalopram (a generic version of the antidepressant Cipramil®) was launched in the Netherlands, Sweden, Finland and Germany on various dates early in 2002.

Metformin (a generic version of the diabetes, alimentary tract and metabolism treatment Glucophage®) was launched in the US in January 2002.

Nabumetone (a generic version of the anti-inflammatory/anti-rheumatic Relifex®) was launched in the US in February 2002.

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Principal Markets

The principal markets of our Generics Business Unit are the two largest generics markets in the world: the United States and Europe. The following table sets forth the aggregate 2002 sales of Generics by region:

Generics	Sales 2002	
	(CHF millions)	(%)
United States	1,086	39
Americas (except the United States)	188	7
Europe	1,059	37
Rest of the World	476	17
Total	2,809	100

In 2002, our dynamic sales growth in the United States of 50% was driven by a favorably developing base business and the launch of amoxicillin/potassium clavulanate.

In Germany, new generic substitution regulations became effective on February 23, 2002 which required pharmacists to substitute a prescribed drug with a less expensive drug, if available. Where more than one generic product was available for the pharmacist to choose from, the pharmacist was required to choose one of the lowest priced options. As a result, our largest German affiliate, Azupharma, was forced to reduce the prices it charged for many of its products in order to remain competitive. We expect the German market to remain difficult in the near future as a result of these new regulations. We are taking steps to improve Azupharma's performance.

Many of our Generics Business Unit's products are used for chronic conditions that require patients to consume the product over long periods of time, from months to years. Sales of the vast majority of our products are not subject to material changes in seasonal demand.

Production

We manufacture our Generics products at more than 15 production facilities around the world. Among these, our principal production facilities are located in Kundl, Austria and Broomfield, Colorado. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages.

We obtain agricultural raw materials such as flours and sugars from multiple suppliers based in both the US and the EU. We obtain chemicals and other raw materials from suppliers around the world, though we focus on US- and EU-based suppliers. The raw materials we purchase are generally subject to market price fluctuations. We seek to avoid these fluctuations, where possible, through the use of long-term supply contracts. In addition, several of our Generics affiliates use e-procurement systems to further strengthen their purchasing productivity.

We produce biotech substances like enzymes for detergents, and many of the active pharmaceutical ingredients, like penicillins, using modern bio-technological methods. These methods include fermentation processes, chemical syntheses and physical production methods, such as sterile precipitation. We are constantly developing other new manufacturing processes.

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Marketing and Distribution

In our Generics Pharmaceuticals Business, we have a broad portfolio of off-patent medicines that we sell to pharmacies, hospitals, and other healthcare outlets. Depending on the structure of the local market, customers are serviced either by the field service team of the local Generics affiliate or by well established partners or joint venture associates.

In our Industrial Business, we sell active pharmaceutical ingredients and biotech substances to manufacturers in the pharmaceutical industry.

In response to rising healthcare costs, many governments and private medical care providers, such as health maintenance organizations (HMOs), have instituted reimbursement schemes that favor the substitution of generic pharmaceuticals for more expensive brand-name pharmaceuticals. In the US, generic substitution statutes have been enacted by virtually all states and permit or require the dispensing pharmacist to substitute a less expensive generic drug for the brand-name version of the drug. In Europe, the use of generic drugs is growing. But in some EU countries, reimbursement practices do not create an efficient incentive for generic substitution. As a result, generic penetration rates in many European countries are still below those reached in the US.

Competition

Other companies selling finished dosage form generic pharmaceutical products are Mylan, Teva, Watson, and Barr in the US and Hexal, Ratiopharm, Stada, Teva, Merck Generics and Alpharma in Europe.

Other companies selling active pharmaceutical ingredients & intermediates are Antibioticos and DSM-Anti-Infectives (both headquartered in the EU) as well as certain East Asian manufacturers.

The market for generic products is characterized by increasing demand for high-quality pharmaceuticals which can be produced at lower costs due to minimized initial research and development investments. Increasing pressure on healthcare expenditures and numerous patent expirations have created a favorable market environment for the generics industry. This positive market trend, however, brings increased competition within the generics industry, leading to ongoing price pressure on generic pharmaceuticals.

Research and Development

Before a generic drug may be marketed, intensive development work must be performed in order to demonstrate the bioequivalency of the generic drug to the original branded drug. Nevertheless, research and development costs associated with generic drugs are much lower than those of their original counterparts. As a result, off-patent drugs can be offered for sale at prices much lower than those of patented drugs, which

must recoup substantial basic research and development costs through higher prices over the life of the product's patent.

Currently, the affiliates of our Generics Business Unit employ almost 750 researchers and developers who explore alternative routes for the manufacture of known compounds and who aim to develop innovative forms of generic drugs. Most of these associates are based at facilities in Kundl, Austria; Dayton, New Jersey; and near Mumbai, India. In 2002, our Generics Business Unit invested CHF 215 million in research and development, which amounted to 7.6% of sales.

We have long term research undertakings totaling CHF 26 million in the aggregate as of December 31, 2002, including CHF 9 million in milestone payments. We intend to fund these expenditures from internally generated resources.

Regulation

The Waxman-Hatch Act in the United States (and similar legislation in the EU and in other countries) eliminated the repetition of extensive clinical trials for generic drugs so long as they could be shown to be of identical quality and purity and to be biologically equivalent to the original branded drug.

In the US, the decision whether a generic drug is bioequivalent to the original branded drug is made by the FDA based on an Abbreviated New Drug Application (ANDA) filed by the generic drug's manufacturer. The process typically takes approximately eighteen months from the filing of the ANDA until FDA approval. However, delays can occur if issues arise regarding the interpretation of bioequivalence study data, labeling requirements for the generic product, or qualifying the supply of active ingredients. In addition, the Waxman-Hatch Act requires a generic manufacturer to certify in certain situations that the generic drug does not infringe any current applicable patents on the drug held by the innovator, or to certify that such patents are invalid. This certification usually results in a lawsuit brought by the innovator against the generic company. In the event of such a lawsuit, the Waxman-Hatch Act imposes an automatic 30-month delay in the approval of the generic drug in order to allow the parties to resolve the intellectual property issues.

In the EU, decisions on bioequivalence can be made by the EMEA under the Centralized Procedure, or by a single member state, after which the Mutual Recognition Procedure may be followed. See "Pharmaceuticals Regulation European Union." Companies may submit Abridged Applications for approval of a generic pharmaceutical product, based upon its "essential similarity" to a medicinal product authorized and marketed in the EU for not less than ten years.

Intellectual Property

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

We take all reasonable steps to ensure that our generic products do not infringe valid intellectual property rights held by others. Nevertheless, originating companies commonly assert patent and other intellectual property rights in an effort to delay or prevent generic competition. As a result, we can become involved in extensive litigation regarding our generic products. If we are unsuccessful in defending these suits, we could be subject to injunctions preventing us from selling our generic products, or to damages, which may be substantial.

In one significant example, we are involved in a series of lawsuits against affiliates of GlaxoSmithKline (GSK) regarding amoxicillin/potassium clavulanate, our generic version of GSK's Augmentin®. Our US affiliate, Geneva Pharmaceuticals, Inc., launched the first generic version of this GSK product in the US in July 2002, following favorable decisions by the United States District Court for the Eastern District of Virginia invalidating seven patents alleged by GSK to cover its Augmentin® product. GSK has appealed the district court's decision invalidating its patents. Should GSK be successful in this appeal, GSK has indicated that it intends to seek to recover its lost profits for sales it would have made had Geneva's product not been on the market.

GSK has also initiated actions against Geneva and several of our other affiliates (Biochemie GmbH, Biochemie SpA, and Novartis AG) in state court in Colorado and before the United States International Trade Commission, alleging that the potassium clavulanate used in

manufacturing the Geneva product is produced using a micro-organism strain allegedly stolen from GSK, an allegation which Geneva and the other Novartis affiliates deny. GSK has also filed a separate lawsuit in state court in North Carolina against our affiliate Lek, alleging that the potassium clavulanate used in manufacturing the Augmentin® generic product sold by Lek is produced using a micro-organism strain allegedly stolen from GSK, an allegation which Lek denies. Should GSK ultimately be successful in any of these actions, we may be subject to an injunction against further sales, and to damages claims, which may be considerable.

OTC

Our Over-the-Counter (OTC) Business Unit manufactures and distributes products for the treatment and prevention of common medical conditions and ailments to enhance people's overall health and well being. In 2002, our OTC business posted CHF 2.4 billion in sales, representing 7% of group sales, and ranking it the sixth largest global self-medication company on the basis of sales, with strong positions in Europe (second largest) and North America (seventh largest), as well as a growing presence in Latin America and Asia. As of December 31, 2002, our OTC Business Unit employed 3,797 associates worldwide.

Key Marketed Products

The OTC Business Unit's main product categories are cough, cold and allergy treatments, gastrointestinal treatments, dermatological treatments, analgesics, vitamins, minerals and supplements, venous disorder treatments and smoking cessation treatment. The major OTC brands are:

Key brands	Market/segment
<i>Nicotinell/Habitrol</i>	Smoking cessation
<i>Voltaren Emulgel</i>	Topical Muscle Pain
<i>Sandoz</i>	Minerals
<i>LamisilAT Cream</i>	Athlete's foot treatment
<i>Otrivin</i>	Nasal decongestant
<i>Triaminic</i>	Pediatric cough & cold
<i>NeoCitran/TheraFlu</i>	Cold remedies and flu
<i>Maalox</i>	Antacid
<i>Ex-Lax/Benefiber</i>	Laxatives
<i>Gas-X</i>	Anti Gas
<i>Denavir/Vectavir</i>	Cold Sore
<i>Fenistil</i>	Wound healing

In 2002, the OTC Business Unit had a number of key brand achievements:

Lamisil, the one week treatment for athlete's foot, had strong sales results, led by Western Europe, where sales increased by 32%. This resulted in a global sales increase for *Lamisil* products of 10% over 2001.

Voltaren Emulgel, a topical analgesic for muscle pain and the largest OTC brand in our portfolio, achieved the number 1 global position in sales within the topical analgesics category with a 6.7% share of the category's sales.

Nicotinell/Habitrol, our smoking cessation franchise, increased sales by 31% over 2001 driven by the introduction of consumer-preferred chewing gum products and by major private label gains in North America and Asia.

We launched several innovative new products or formulations, including *Otrivin* nasal decongestant, which was developed based on insights from consumers. The introduction of new moisturizing and allergy formulations of *Otrivin* supported the brand's outstanding 11% increase in worldwide sales compared to 2001.

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We acquired the *Buckley's* cough and cold remedy brand in Canada, and began selling *Buckley's* products in March 2002.

2002 was also the first full year of sales of the OTC *Benefiber* brand laxative product, with the brand quickly establishing a 7% share of its market segment in the US.

It is important to the overall success of the Novartis Group that we maximize the revenues we obtain from our products at each stage of their existence. The OTC Business Unit contributes to this life-cycle management goal with key brands such as *Voltaren Emulgel*, *Lamisil AT* and *Denavir/Vectavir* generating substantial sales after their transfer from the Pharmaceuticals Division.

Principal Markets

In 2002, OTC realized the majority of its sales in its two principal markets: the US and Europe, including Eastern Europe. In 2002, the OTC Business Unit and Kao Corporation agreed to end their joint venture to market OTC products in Japan. However, OTC remains committed to expanding its presence in the Japanese market. The following table sets out our 2002 sales by geographic region.

OTC	Sales 2002	
	(CHF millions)	(%)
United States	751	32
Americas (except the United States)	223	9
Europe	1,114	48
Rest of World	271	11
Total	2,359	100

The OTC business is marked by a high degree of seasonality, with our cough, cold and allergy brands including *Friaminic*, *NeoCitran/Theraflu* and *Tavist* heavily influenced by the timing and severity of the annual cold and flu season and allergy seasons.

Production

Our OTC Business Unit has a manufacturing and supply infrastructure comprised of the Business Unit's own plants, strategic third parties and other Novartis Group plants (which are predominantly owned and operated by the Pharmaceuticals Division). The primary OTC plants are located in Switzerland and in the United States.

The goal of our supply chain strategy is to produce and distribute high quality products in an efficient manner. The balance of internal, external and Group sites provides flexibility and predictable sources of supply in the event of capacity constraints or other potential disruptions to supply. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced

material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

Raw materials for the manufacturing process are purchased from a number of our affiliates and third party suppliers. For the most part, the products and services we procure are not proprietary and are available from a number of suppliers. We often "single-source" supplies, but we have a policy of having at least a second approved and validated supplier registered for most key materials so that substitution is possible. Where practical and beneficial, we have long-term contracts in place on key production inputs. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials.

Marketing and Distribution

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We aim to be a leading global participant in fulfilling the needs of patients and consumers for self-medication healthcare. Strong brands, science-based products and in-house marketing and sales organizations are key strengths that allow the business to achieve this objective. We distribute our products through various channels, such as pharmacies, food, drug and mass retail outlets.

Competition

The fundamental trends driving the growth of our OTC business are increasing pressures on government health funding, changing consumer attitudes towards personal well being, the rise of a self-care mentality among consumers and successful switches of prescription products to OTC status. Other companies selling over-the-counter pharmaceutical products include major international corporations with substantial financial and other resources, such as Aventis, Bayer, GlaxoSmithKline, Johnson & Johnson, Roche, Pfizer, Procter & Gamble and Wyeth.

Research and Development

In OTC, the focus of research and development activities is primarily on dermatology, analgesics, cough, cold, allergy, gastrointestinal, minerals, and cardiovascular risk reduction (through smoking cessation programs). OTC also works closely with the Pharmaceuticals Division to evaluate appropriate products that can be switched from prescription to OTC status. The development of line extensions to leverage brand equities is also of high importance. These extensions can take many forms including new flavors, new galenical forms and more consumer-friendly packaging.

The OTC business employs over 200 associates in R&D with the primary research facility located in Switzerland. Local country R&D organizations largely manage compliance, regulatory needs and medical affairs. In 2002, the OTC Business Unit spent CHF 104 million in R&D, representing approximately 4.4% of net sales.

We have long term research undertakings totaling CHF 4 million in the aggregate as of December 31, 2002. We intend to fund these expenditures from internally generated resources.

Regulation

For OTC products, the regulatory process for bringing a product to market consists of preparing and filing a detailed dossier with the appropriate national or international registration authority and obtaining approval in the United States or registration in the EU and the rest of the world. See "Pharmaceuticals Regulation."

In the US, in addition to the NDA process which is also used to approve prescription pharmaceutical products, an OTC product may be sold if the FDA has determined that the product's active ingredient is generally recognized as safe and effective. FDA makes this determination through a regulatory process known as the OTC Review. In the OTC Review, the FDA establishes, in a series of monographs, the conditions under which particular active ingredients may be recognized as safe and effective for OTC use.

Pharmaceutical companies can market products containing these active ingredients without the necessity of filing an NDA and going through its formal approval process, so long as the company complies with the terms of the published monograph.

Most countries also have a regulatory process for switching a particular pharmaceutical product from prescription to OTC status. The process varies from country to country.

Intellectual Property

Our OTC business is brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its

use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

ANIMAL HEALTH

Our Animal Health Business Unit enhances and extends the life of companion animals and improves the health and productivity of farm animals. At December 31, 2002, the affiliates of Animal Health employed 2,218 associates and achieved sales of CHF 971 million, which represents 3% of the Group's sales.

Animal Health researches, develops, manufactures and markets a wide variety of products for both companion and farm animals including farmed fish. In 2002, the companion animal segment accounted for 48% of our total Animal Health sales and the farm animal segment, including Vaccines and Aquaculture, for 52%. Products include parasiticides, antimicrobials, vaccines and veterinary pharmaceuticals. Our Animal Health business has a dedicated research and development team, which benefits from synergies with other Novartis businesses, most notably, research in the Pharmaceuticals Division.

We acquired Grand Laboratories Inc. and ImmTech Biologics Inc. in the United States in January 2002 for a combined minimum purchase price of CHF 168 million. The final price may increase depending on whether certain future sales and other targets are met. These businesses specialize in the development, manufacture and marketing of vaccine products for cattle and pigs. Through these acquisitions we increased the share of vaccines to 8% of total sales, strengthened our position in the vaccines market and established our presence in the US farm animal segment.

Recently Launched Products

Product	Description	Registration/Launch Status
<i>Atopica</i>	Treatment of topic dermatitis in dogs	Registered and launched 2002 in Australia/New Zealand, Switzerland and France
<i>Agita</i>	Farm fly control	Launched in Thailand, Philippines, Malaysia, Turkey, Slovakia, Slovenia.
<i>Capstar</i>	Fast-acting oral flea control for dogs and cats	Launched in the EU countries in 2002
<i>Clik</i>	All-season protection against blowflies on sheep	After first EU launch in the UK in 2001, it was registered and launched in France, Ireland and Netherlands
<i>Deramaxx</i>	First COX-2 inhibitor approved for pain control in dogs	Approval of acute pain control claim was received in the USA in September with launch in the same month
<i>Econor</i>	Therapeutic antimicrobial for pigs	Re-launch in EU countries following EMEA approval of additional data
<i>Fortekor</i>	Congestive Heart Failure in dogs, CRI in cats	Launch in South Africa
<i>Milbemax</i>	Intestinal worm control in dogs and cats	Product launched after first EU approval in France and in Australia
Vaccines		
Digital Dermatitis Vaccine	Vaccine for Digital Dermatitis in dairy	Launched in the US

Product	Description	Registration/Launch Status
Forte Vaccine Range	Prevention of bacterial and viral diseases in farmed salmon	Launched in Norway
<i>Pyceze</i>	Control of fungal infections in fish and fish eggs	<i>Pyceze</i> is the only authorized treatment to replace previously used products now banned by the UK authorities

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Key Marketed Products

Main Products	Description
Pets (dogs and cats)	
<i>Fortekor</i>	Treatment of congestive heart failure in dogs and chronic renal insufficiency in cats
<i>Interceptor</i>	Prevention of heartworm and intestinal worms
<i>Program</i>	Control of fleas
<i>Sentinel</i>	Prevention of heartworm and control of fleas and intestinal worms
Farm animals	
<i>Clik</i>	Season-long prevention of blowfly strikes in sheep
<i>Endex</i>	Treatment and control of liver fluke and gastro-intestinal worms in cattle and sheep
<i>Fasinex</i>	Treatment and control of liver flukes in cattle and sheep
<i>Tiamutin, Econor</i>	Treatment of bacterial infections in pigs and poultry
<i>Vetrazin</i>	Treatment of blowfly in sheep
Vaccines and Aquahealth	
<i>Betamax, Excis</i>	Treatment and control of salmon lice
<i>Birnagen Forte, Furogen</i>	Prevention of infectious pancreatic necrosis in farmed salmon
<i>Bovidec</i>	Prevention of bovine viral diarrhea in cattle
<i>Fusogard</i>	Prevention of foot rot and liver abscess control in cattle
<i>Pyceze</i>	Treatment and control of fungal infections in fish and fish eggs
<i>Scourboss, Somnustar</i>	Prevention of enteric disease in cattle
<i>Virashield</i>	Prevention of respiratory disease in cattle

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Principal Markets

Products for companion animals are sold predominantly in North America, the EU, Australia and Japan. In most other countries, sales of farm animal products dominate. The following table sets out 2002 total sales of our Animal Health products by region:

Animal Health	Sales 2002	
	(CHF millions)	(%)
United States	364	38
Americas (except the United States)	136	14
Europe	294	30
Rest of the World	177	18
Total	971	100

Pharmaceutical and biological product sales in all of our main Animal Health business segments (aqua, farm and companion animals) fluctuate seasonally, and can be significantly affected by climatic and economic conditions, and by changing health or reproduction rates of animal populations.

Production

Approximately 80% of our production volume is manufactured by third parties, including Novartis affiliates in other Business Units. Animal Health has production facilities of its own located around the world, including the US, France and China.

The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

We obtain our raw materials from sources around the world. We depend to a large extent on suppliers for the raw materials, intermediates and active ingredients. We make use of long term supply agreements to limit the volatility of prices charged to us for raw materials.

Marketing and Distribution

Our products are predominantly prescription-only treatments for animals. The major distribution channels are veterinarians and wholesalers of veterinary products. Primary marketing efforts are targeted at veterinarians using such marketing tools as printed materials, direct mail, advertisements and articles in the veterinary special press, our participation at conferences for veterinarians and the organization of special educational events, focusing primarily on new treatment areas. In addition, we engage in general public relations activities, including advertising in the general printed media and direct advertising of brands, respecting the relevant national legislation in each country. Novartis Animal Health has representatives in approximately 40 countries.

Competition

Other companies selling veterinary pharmaceutical products for companion and farm animals are Bayer, Elanco, Fort Dodge (Wyeth), Intervet (Akzo Nobel), Merial, Pfizer, and Schering-Plough. Most of these companies offer a broad range of products for both companion and farm animals, and their marketing efforts are at a comparable level to ours.

Research and Development

Novartis Animal Health has dedicated research facilities in Switzerland and Australia for antiparasitics. In the United States, United Kingdom and Canada, we focus on the development of new vaccines for farm animals and farmed fish. In 2002, we devoted CHF 94 million to research and development, representing 9.7% of total sales.

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In these efforts, we use high-capacity, in-vitro micro-screening to assess a large number of natural products and synthetic chemicals for bioactivity. Our researchers also collaborate with external partners to develop veterinary treatments. Drug delivery projects, some in collaboration with external partners, concentrate on our key treatment areas and aim to improve efficacy and ease of use.

In addition to these research activities, we exploit synergies with other Novartis businesses to develop new products. Products originally developed for human use are further developed to treat comparable diseases in companion animals. The products *Atopica*, *Clomicalm* and *Fortekor* are examples of effective synergies with the Pharmaceuticals Division.

We have long term research undertakings totaling CHF 11 million in the aggregate as of December 31, 2002 including CHF 8 million in milestone payments. We intend to fund these expenditures from internally generated resources.

Regulation

The registration procedures for animal medicines are similar to those for human medicines. In the US, animal health products are generally regulated by the FDA. Certain product categories are regulated by the Environmental Protection Agency (EPA), and vaccines are regulated by the US Department of Agriculture (USDA). Within the FDA, the Center for Veterinary Medicine is responsible for animal drugs. A New Animal Drug Application for product registration must be accompanied by extensive data on safety, environmental effects and on clinical studies, as well as information on manufacturing, quality control and labeling.

In the EU, veterinary medicinal products need marketing authorization from the competent authority of a member-state (national authorization) or through a community procedure, which is either the Centralized Procedure or the Mutual Recognition Procedure. In the Centralized Procedure, applications are submitted to the EMEA, and the marketing authorization that is granted by the European Commission is then valid throughout the EU. In the Mutual Recognition Procedure, the marketing authorization granted by the first member-state is mutually recognized by the other member-states through a shortened approval procedure.

In Japan, veterinary medicinal products are approved by the Ministry of Agriculture Fisheries and Food ("MAFF"). The application, including supplementary local trial data, is reviewed by the MAFF and a General Investigation Committee, a Special Investigation Committee and a Permanent Investigational Committee before authorization is granted.

Intellectual Property

Our business is brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its

use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

MEDICAL NUTRITION

Our Medical Nutrition Business Unit is a leader in its field, and offers a wide range of enteral and oral nutrition products and devices tailored to the varying needs of patients and healthcare professionals. We are dedicated to maintaining and improving the health and well being of consumers and patients at home or in health care delivery settings (hospitals, nursing homes and home health care) by fulfilling their nutritional needs. In partnership with health care professionals, Medical Nutrition offers the highest quality medical nutrition products, devices and services ranging from standard to disease-specific products that improve health and quality of life for all age groups from pediatrics to geriatrics. This broad range of supplements, tube feedings and food provides essential nutrients for good nutrition when illness or disabilities limit a person's ability to eat a balanced diet.

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In November 2002, we divested our Food & Beverage business, including Ovaltine®/Ovomaltine®, Caotina® and Lacovo®, to Associated British Foods plc for Euro 272.5 million (approximately CHF 402 million). The transaction is in furtherance of our strategy of focusing on healthcare and our core pharmaceuticals business. Our remaining Health Food & Slimming and Sports Nutrition businesses have been reorganized into a stand-alone unit called Nutrition & Santé. For reporting purposes, this unit's results will be included in the results of the Medical Nutrition Business Unit. We have announced our intention to sell Nutrition & Santé once an attractive bid is received.

In 2002, Medical Nutrition (including Nutrition & Santé and the Food & Beverage business until the date of its divestment) posted CHF 1.4 billion in sales, representing 4% of Group sales. As of December 31, 2002, Medical Nutrition (including Nutrition & Santé) employed 2,701 associates worldwide.

Key Marketed Products

Medical Nutrition. Our Medical Nutrition Business Unit covers the full spectrum of disease and age specific nutrition. Depending on their condition, patients need specific nutritional support to protect and accelerate their recovery from a disease or surgery. From our comprehensive range of innovative and trusted products for Medical Nutrition, we have created five strong and recognizable global brands.

Key brands	Market/segment
<i>Resource</i>	Range of standard and disease-specific oral nutritional supplements
<i>Isosource</i>	A complete tube and sip feed, providing for normal nutritional requirements
<i>Novasource</i>	Range of nutritional tube and sip feeds for specialty or disease specific needs
<i>Impact</i>	Range of standard and disease-specific oral nutritional supplements
<i>Compat</i>	Range of standard and specialty devices to deliver tube feeds to the gastrointestinal tract of patients

Medical Nutrition will continue to focus on a disease-specific approach while leveraging its global brands especially in the Acute and Home Care market segments.

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During 2002, Medical Nutrition established a major partnership in the US with the Walgreens chain of drug stores, to better capture the outpatient market. Under this partnership, Walgreens promotes our Medical Nutrition products through its promotional and advertising activities. Outpatient customers are able to purchase our Medical Nutrition products on-line through the Walgreens Medical Nutrition Center, located at the www.resource.walgreens.com website or through a toll-free telephone number, for delivery through Walgreens' order fulfillment system.

We have made successful in-roads in Japan by licensing our *Impact* brand to Ajinomoto Co., Ltd.

2002 was also the first full year of sales of the *Sustagen* brand in Australia and New Zealand. This brand was licensed in from Mead Johnson & Co. at the end of 2001.

During 2002, the Medical Nutrition Business Unit ceased doing business in Argentina due to the economic situation in that country.

Nutrition & Santé. The stand-alone unit Nutrition & Santé has the following brands:

Key brands	Market/segment
Health Food & Slimming brands:	
<i>Céréal</i>	A broad range of natural and dietetic foods to health conscious consumers
<i>Gerblé</i>	A broad range of health food products, many made with wheat germ, which deliver functional benefits

Key brands	Market/segment
<i>Gerlinéa</i>	An affordable slimming product range, targeting consumers who wish to remain slim whilst eating as normally as possible, rather than consumers with a medical weight issue
<i>Modifast</i>	Slimming products with added vitamins, minerals and proteins
<i>Dietisa</i>	A product portfolio range including medicinal plants, health foods, dietary supplements and cosmetics sold mostly in Spain and Portugal
<i>Pesoforma</i>	Similar product range as <i>Gerlinéa</i> focusing at the Italian market
<i>Lecinova</i>	Food supplement sold in Italy
<i>Milical</i>	Meal substitutes range with very low calorie diet (VLCD) and vitamins, minerals & supplements (VMS)
Sports Nutrition brands:	
<i>Isostar</i>	Marketed with a niche, scientific strategy to appeal primarily to professional and performance-driven athletes
<i>Powerplay</i>	Products targeted to bodybuilding available only in Switzerland, Germany and Austria
<i>Mineralplus</i>	A recovery powder targeted at athletes who participate in endurance sports. Available only in Germany and Austria

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Principal Markets

In 2002, our Medical Nutrition Business Unit (including Nutrition & Santé) realized the majority of its sales in its two principal markets: the United States and the EU. The following table sets out our 2002 sales by geographic region. The figures include the sales of Nutrition & Santé and the divested Food & Beverage business through the date of its divestment.

Medical Nutrition	Sales 2002	
	(CHF millions)	(%)
United States	398	28
Americas (except the United States)	43	3
Europe	799	56
Rest of World	194	13
Total	1,434	100

Medical Nutrition's products are not subject to seasonality of demand.

Production

Our Medical Nutrition Business Unit has a manufacturing and supply infrastructure comprised of the Business Unit's own plants as well as strategic third party suppliers and other Novartis Group plants. The most significant of the dedicated Medical Nutrition plants are located in the US and Germany.

The goal of our supply chain strategy is to produce high quality products in an efficient manner. The balance of internal, external and Group sites provides flexibility and predictable sources of supply in the event of capacity constraints or other potential disruptions to ongoing supply.

Raw materials for the manufacturing process are purchased from a number of our affiliates and third party suppliers. For the most part, the products and services we procure are not proprietary and are available from a number of suppliers. Where practical and beneficial, we have long-term contracts in place on key production inputs. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials. The manufacture of many of our products is regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

Marketing and Distribution

The majority of the Medical Nutrition Business Unit's sales (excluding Nutrition & Santé) are to health institutions, such as hospitals, nursing homes, home healthcare providers and group purchasing organizations. In addition, in the US, outpatient consumers can purchase our products directly through our Walgreens partnership, by means of a toll-free telephone call or the internet.

Competition

Novartis Medical Nutrition (excluding Nutrition & Santé) is the second largest medical nutrition company in the US in terms of sales, and the fourth largest in Europe. Other companies selling medical nutrition products are Abbott Ross, Fresenius, Mead Johnson, Nestlé and Nutricia.

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Research and Development

The Medical Nutrition research and development function is responsible for generating new products and therapies based on the needs of the market. Concepts are developed into prototypes by incorporating new and existing ingredients, processes, and packaging. Prototypes are scaled from bench top to pilot plant to production scale. Product attributes are validated through clinical trials under the direction of R&D, which assures that the product is safe and well-tolerated. Label claims, label designs, and regulatory compliance issues are also addressed. The product's attributes are reviewed by management prior to product launch. On-going product quality is monitored and improved through specification development, testing, and corrective and preventative action.

We have long term research undertakings totaling CHF 4 million in the aggregate as of December 31, 2002. We intend to fund these expenditures from internally generated resources.

Regulation

Foodstuffs are highly regulated in order to protect the public health. The following areas are generally subject to international and national food regulations: development, manufacturing, packaging, quality (food standards, ingredients), safety, labeling and advertising of foods. In the US, Medical Nutrition's products are covered by FDA regulations covering medical foods, dietary supplements (under the DSHEA regulations) and medical devices.

Intellectual Property

Our Medical Nutrition businesses are brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

INFANT & BABY

In 2002, our Infant & Baby Business Unit, best known for its *Gerber* products, posted CHF 2.1 billion in sales, which amounted to a 3% increase in local currencies over 2001, and represented 6% of the Group's sales. The major contributor to this continued solid performance is the US, spurred by innovations in the Juice, *Graduates* and *Tender Harvest* lines. An outstanding success has been *Lil' Entrees*, a new line of microwavable convenience meals in trays. These results are especially strong, given that 2002 baby products industry sales have been negatively impacted by a 1% decline in births in the US in 2001.

Besides nutrition products, the company offers a wide variety of other products for infants and toddlers, including a baby accessory line (featuring nursing and feeding aids), wellness products (such as lotions and washes), and life insurance. As of December 31, 2002, our Infant & Baby Business Unit employed 4,901 associates worldwide.

Key Marketed Products

Globally, our Infant & Baby Business Unit offers more than 200 food products. From *Gerber 1st FOODS* to *Graduates*, the company's product line covers each phase of child development with diverse flavors and textures. *Gerber* baby and toddler foods include Cereals, *1st FOODS*, *2nd FOODS*, *3rd FOODS*, *Tender Harvest* (organic food), *Finger Foods*, Fruit and Vegetable Juices and *Gerber Graduates* Toddler Food. *Gerber's* nutrition business began in 1928, in Fremont, Michigan and will mark its 75th anniversary in 2003. *Gerber* began its baby accessory line in 1960 and now markets more than 350 *Gerber* and NUK® branded products. Bottles, teethingers, pacifiers, breastfeeding accessories and spill-proof cups are just a few of the products now being distributed to babies and parents around the world.

Continuing its commitment to baby care, *Gerber* introduced a complete line of skincare and healthcare products in 1999, all designed to help parents raise happy, healthy babies. The skincare products include a full line of washes, lotions and tear-free shampoos with the *Gerber SkinNutrients* unique blend of seven vitamins and natural ingredients. The healthcare line includes Pediatric Electrolyte Solution, Tooth & Gum Cleanser, Diaper Rash Ointment, Gas Relief Drops and Vitamin Drops.

We have licensed the *Gerber* trademark to an unaffiliated company, Gerber Childrenswear, Inc., which sells bibs, apparel, shoes and similar products carrying the trademark. Gerber Childrenswear, Inc. pays royalties to our affiliate, Gerber Products Company, for the use of the trademark.

In addition, since 1967, our affiliate Gerber Life Insurance Company, has been marketing life insurance protection directly to the consumer. Currently, Gerber Life's *Grow Up* policy is the leading juvenile whole life insurance product distributed in the United States and Canada.

The major brands and product groups in Infant & Baby are:

Key Brands	Product groups	Main markets
<i>Gerber, Graduates, Lil' Entrees, Tender Harvest, Yukery, 1st FOODS, 2nd FOODS, 3rd FOODS</i>	Baby food	US, Latin America, Europe, Asia
<i>Argos, Fiona, Gerber, Lillo by Gerber, Ninet, NUK®</i>	Baby Care	US, Canada, Asia, Latin America
<i>Argos, Capent, Gerber, Ninet</i>	Baby Wellness	US, Latin America
<i>Gerber Life</i>	Insurance	US

Recently Launched Products

In the US, *Gerber* continued to build on its position as a leader in infant feeding and care with a number of innovations in 2002. In response to consumers' need for convenience, *Gerber* launched single-serve plastic packages, ideal for out-of-home feeding. *Gerber* now offers all juices and top selling fruit purees in single-serve plastic containers. The number of different products packaged in plastic will continue to expand in 2003. In addition, 2002 saw our successful launch of a new line of *Gerber* multi-compartment dinners, *Lil' Entrees*. The *Lil' Entrees* line offers parents of babies and toddlers a new alternative which provides meals for their children that are both nutritious and convenient. Finally, the launch of the single-serve cereal pouch in 2002 demonstrates the growing importance of the convenient single-serve segment.

Within the *Gerber Care/Wellness* business, a number of innovative new products were launched at the end of 2002. The new spill-proof *Insulated Cool Cup* helps beverages to retain their desired temperature longer. Also, two new cups were launched that help during key development transitions. The first helps

babies transition from the bottle to spill-proof cups. The second will later help them transition from the spill-proof cups to adult cups. For breast feeding mothers, a line of breast therapy items was introduced in 2002, which includes soothers, warm-cool packs and moistening sticks.

Principal Markets

In 2002, the Infant & Baby Business Unit realized the majority of its sales in its two principal markets: the United States and Latin America. The following table sets out our 2002 sales by geographic region.

Infant & Baby	Sales 2002	
	(CHF millions)	(%)
North America	1,635	79
Latin America	350	17
Europe/Middle East/Africa	75	3
Asia	15	1
Total	2,075	100

Infant & Baby retail sales are not significantly affected by seasonal variations.

Production

Key factors in Infant & Baby's successful supply chain strategy include a high efficiency, low cost structure and the mitigation of risks through multiple production sources. Regional sites serve specific markets but are also capable of providing support as needed to other regions in the event of supply disruption. Gerber operates production facilities in North America, South America and Eastern Europe for nutrition and care products. Major production sites ranked by size are in the US, Mexico and Poland.

The manufacture of most of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances. The Baby Accessory and Wellness franchises tend to utilize suppliers from a wider geographic area.

We often "single-source" supplies, but we have a policy of having at least a second approved and validated supplier registered for most key materials so that substitution is possible. Where practical and beneficial, we have long-term contracts in place on key production inputs. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials.

Raw materials for the manufacturing process are purchased from a number of third party suppliers. For the most part, raw materials for our nutrition products are sourced from within the country of use. Our growers and suppliers are well versed in our strict agricultural requirements and tend to have long term relationships with us. We are subject to adverse weather and growing conditions, but mitigate this as much as possible with alternative geographic sourcing areas.

Marketing and Distribution

The mission for the Infant and Baby Business Unit is to leverage our brand leadership of trust in helping parents nurture happy, healthy babies into the leading infant and baby brand around the world. In 2002, *Gerber* began converting glass jars to plastic containers for its nutrition products. This major innovation is a result of consumer data which clearly indicates the preference for plastic as a better fit for today's active parents and families. Strong brands, product development based on sound nutrition

principles, and in-house marketing and sales organizations are some of our key strengths. *Gerber* products are distributed through food, drug and mass merchandiser retail outlets.

Competition

Other companies selling infant and baby foods are Del Monte and Beechnut in the US, Nestlé in Latin America, Nutricia in Eastern Europe and other regional businesses elsewhere. Other companies selling baby accessory and wellness products are Johnson & Johnson, Playtex and Avent in the US. There are other companies selling these products located in Latin America and Asia.

Research and Development

The Infant & Baby Business Unit has a Research and Development department which uses a multi-faceted approach to deliver consumer innovation by developing new processes, products and packaging for the nutrition, care and baby accessory franchises. Internally developed new processes include *NatureLock*, a patented cooking process for jarred fruits and vegetables. New products include *Lil' Entrees*, our nutritious, portable meals for toddlers. Packaging innovations include aseptic plastic packaging, which provide additional convenience for consumers.

In addition, *Gerber* R&D oversees research regarding the needs of infants and their development. For example, *Gerber's* Feeding Infants and Toddlers Study (FITS) analyzed the nutrient intake of 3,000 infants and toddlers. The results of this Study will be published in 2003. In 2002, the Infant & Baby Business Unit invested approximately CHF 36 million in research and development (1.7% of Infant & Baby sales).

Regulation

Foodstuffs are highly regulated in order to protect the public health. The following areas are generally subject to international and national food regulations: development, manufacturing, packaging, quality (food standards, ingredients), safety, labeling and advertising of foods. Infant foods are regulated by various governmental agencies on a country by country basis. There is no global harmony of requirements and regulations. Many countries do require product registrations to document safety and nutrition of imported food products. *Gerber* food products are specifically designed to meet the nutritional needs of infants and toddlers in the regions where they are sold and generally exceed requirements of regulatory agencies. These nutritional need standards are determined based on independent, peer-reviewed research, or by studies sanctioned by authorities such as the World Health Organization (WHO) or the US Department of Health and Human Services.

In the US, agencies such as the FDA, the US Department of Agriculture (USDA), the Environmental Protection Agency and the Consumer Product Safety Commission are responsible for providing safety specifications and otherwise regulating our products and ingredients. The FDA and USDA have issued regulations and standards regarding the use of specific ingredients in certain types of food products, including which ingredients are allowed, and at what level, as well as ingredients that may be required in certain products. In addition, these agencies regulate food product labeling and the claims which can be made regarding food products. Globally, safety of ingredients and products are guided by the Codex Alimentarius, a section of the WHO.

Intellectual Property

Our Infant & Baby Business Unit is brand-oriented, with the *Gerber* baby trademark among the most recognized in the world. Therefore, we consider this trademark, as well as others within Infant & Baby, to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Patents may cover products, product formulations, processes, intermediate products or product uses. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

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The business of our CIBA Vision Business Unit is conducted by a number of affiliated companies in more than 70 countries. CIBA Vision is a world leader in the research, development and manufacturing of eye care products, specifically soft contact lenses, lens care products, and ophthalmic surgical products. As of December 31, 2002, the affiliates of CIBA Vision employed 6,003 associates worldwide. In 2002, the affiliates of CIBA Vision had sales of CHF 1.8 billion, representing 6% of Group sales.

CIBA Vision completed the acquisition of Wesley Jessen VisionCare, Inc., a leading provider of specialty contact lenses in the United States, in October 2000.

On January 1, 2001, CIBA Vision's Ophthalmic Pharmaceuticals business became part of our Pharmaceuticals Division in a reorganization.

Recently Launched Products

Focus DAILIES Toric, the world's first and only daily disposable lens for astigmatism, was introduced in a number of European countries in June through October 2002. Additional launches are planned globally for the near future.

Focus NIGHT & DAY continuous wear lenses received the CE Mark for therapeutic use in July 2002 and are now offered throughout Europe with this indication.

We launched a number of new product additions around the world to our leading brands of cosmetic and color contact lenses. Those products include *FreshLook Radiance*, new designs for *WildEyes* novelty lenses, *GlitterEyes* specialty contact lenses, and *DuraSoft 2 ColorBlends*, daily wear, specialty color lenses, incorporating CIBA Vision's unique ColorBlends technology.

SOLO-care PLUS, an enhanced formulation of our one-bottle lens disinfection system, offers a one-bottle, no rub, no rinse cleaning and disinfection system and was introduced in the US in April 2002.

AQuify, an innovative lens drop that replicates the behavior of natural tears to provide long-lasting comfort of contact lenses initially launched in Europe in February 2002 and was recently launched in Benelux, Chile and Hungary.

CV232 SRE (Square Round Edge), the latest design of the pre-folded intraocular lens that allows a smaller incision during cataract surgery, was introduced in May in Europe and August in the US.

Vivarte PRESBYOPIC, an anterior chamber phakic refractive lens used for the correction of presbyopia, was launched in Europe in September 2002.

PRL Injector System, an improved convenient injector system for the *PRL* phakic refractive lens, was launched in Europe in September 2002.

VisThesia, a combination viscoelastic and anesthetic, which may help shorten cataract surgeries, was introduced in Europe in September 2002.

In February, we introduced the *Tear Film Analyzer* in the US. The *Analyzer* is a diagnostic system that helps evaluate the levels of certain proteins in tear film which can help determine the cause of dry eye symptoms.

In August 2002, we obtained exclusive rights in the US and Canada to market the *Ex-PRESS* mini glaucoma shunt, an innovative and minimally invasive approach for treating glaucoma.

Key Marketed Products

The table below sets out the key marketed products in each of CIBA Vision's three principal product segments:

Main Products	Description
Contact Lenses	
<i>Focus DAILIES</i>	One-day disposable
<i>Focus DAILIES</i> Progressives	One day disposable to correct presbyopia
<i>Focus DAILIES</i> Toric	One day disposable to correct astigmatism
<i>Focus NIGHT&DAY</i>	Extended wear for up to 30 days and nights continuous wear
<i>Focus Progressives</i>	Corrects presbyopia
<i>Focus Toric</i>	Corrects astigmatism
<i>Focus</i> Monthly	Replaced monthly
<i>Focus</i> 1-2 Week	Replaced every one to two weeks
<i>Focus</i> 1-2 Week SoftColors	Replaced every one to two weeks; enhances the color of light eyes
<i>DuraSoft</i> 3 Colors	Conventional cosmetic tinted lenses
<i>FreshLook</i> Colorblends	Opaque lenses that blend three colors on one lens creating a more natural looking cosmetic tinted lens for dark or light eyes
<i>FreshLook</i> Colors	Disposable lenses for eye color change
<i>FreshLook</i> Radiance	Lens for people with light or dark eyes that provides illuminating effects that vary based on a person's natural eye color, skin tone and hair color
<i>GlitterEyes</i>	Specialty contact lenses that give eyes the brilliant gleam of glitter
<i>Precision UV</i>	First Disposable lens with ultraviolet light protection
<i>WildEyes</i>	Novelty lenses
<i>Illusions</i> Opaque	Conventional lenses for changing the color of dark eyes
<i>Cibasoft</i>	Conventional lenses with handling tint
<i>Cibasoft</i> Softcolors	Conventional lenses for enhancing the color of light eyes

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Lens Care Products

<i>AOSept</i>	Hydrogen peroxide disinfectant system
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<i>AOSept Clear Care/AOSept PLUS</i>	An enhanced formulation of our leading hydrogen peroxide disinfectant; the first one-bottle, no rub lens care solution with no added preservatives in the United States
<i>SOLO-care</i>	One bottle lens disinfectant system
<i>SOLO-care Plus</i>	An enhanced formulation of our one-bottle lens disinfection system; offers a one-bottle, no rub, no rinse cleaning and disinfection system
<i>BLUE Sept/BLUE Vision</i>	One-step hydrogen peroxide lens disinfection system; features blue color indicator
<i>QuickCARE/InstaCARE</i>	Five-minute disinfectant system
<i>Pure Eyes</i>	Two-bottle hydrogen peroxide system
<i>Focus Lens Drops</i>	For lubricating contact lenses
<i>AQuify</i>	Lens drop that replicates natural tears
Ophthalmic Surgical	
<i>MemoryLens</i>	Pre-folded intraocular lens, used in a surgical procedure to restore vision in people with cataracts
<i>CV232 SRE (Square Round Edge)</i>	Latest design of the pre-folded intraocular lens that allows a smaller incision during cataract surgery
<i>VisThesia</i>	Combination of viscoelastic and anesthetic
<i>PRL (Phakic Refractive Lens)</i>	The first and only foldable posterior chamber phakic refractive lens designed to float on a patient's natural lens and to self-center behind the iris
<i>Vivarte</i>	The first and only foldable anterior chamber phakic refractive lens
<i>Vivarte PRESBYOPIC</i>	Anterior chamber phakic refractive lens used for the correction of presbyopia
<i>Ex-PRESS mini glaucoma shunt</i>	Minimally invasive approach for the surgical treatment of glaucoma
<i>Tear Film Analyzer</i>	Diagnostic system that helps evaluate the levels of certain proteins in tear film which can help determine the cause of a patient's dry eye
<i>Bioinsulated Punctum Plus</i>	Provides relief from severe dry eye symptoms
<i>UniVisc</i>	Viscoelastic solution
<i>Ophthalin and Ophthalin Plus</i>	Viscoelastic solution offered outside the United States

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Products in Development

CIBA Vision intends to expand its product portfolio through both its own dedicated research and development resources as well as the acquisition of new and innovative technologies. Product development is focused on contact lenses as well as ophthalmic surgical products and involves the creation and development of entirely new product offerings in these markets as well as line extensions of current products. The acquisition of Wesley Jessen VisionCare in October 2000 included several exciting technologies and CIBA Vision anticipates incorporating these technologies into other contact lens products in its pipeline.

In the ophthalmic surgical area, CIBA Vision is working on the development of innovative products including the Sub-epithelial Separator. The Sub-epithelial Separator (SES) is an automated microkeratome-based medical device that creates an epithelial flap delaminating (or separating) the epithelium from the basement membrane during laser surgery. This device eliminates the need for alcohol currently used during

the procedure. By eliminating the alcohol, which can be toxic to cells, the device promotes faster healing, less damage to cells and less pain for patients.

Principal Markets

Our principal markets, in terms of 2002 sales, were North America (United States and Canada), Europe and Japan. Sales are not subject to seasonality. The following table sets forth 2002 sales for CIBA Vision by region:

CIBA Vision	Sales 2002	
	(CHF millions)	(%)
United States	690	39
Americas (except the United States)	97	5
Europe	594	34
Japan	261	15
Rest of the World	120	7
Total	1,762	100

Production

CIBA Vision has major production facilities in Indonesia, Georgia and Illinois (United States), Germany, Puerto Rico and Canada. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

We purchase basic chemical commodity raw materials for our lens products from industrial vendors. These raw materials are then reformulated into the monomers and polymers required to produce contact lenses. Polymer chemistry is one of the innovative elements in our contact lens products. The technology to produce the polymers and monomers is stable and well-defined.

We enter into long-term supply contracts (generally over one to two years) with industrial raw material vendors, which limits volatility. In addition, most raw materials are basic chemical commodities and multiple suppliers are available. Certain lens products use proprietary chemicals that are produced specifically for us and sold exclusively to us. We also use a custom-designed process to synthesize

macromonomers, a key raw material needed in contact lens production, which are produced by a contract vendor for a negotiated price.

Marketing and Distribution

Contact lenses are considered medical devices by regulatory authorities and, therefore, are available only with a prescription from an eye-care professional in most countries. CIBA Vision lenses can be purchased from independent eye care professionals and optical chains. CIBA Vision's lens care products can be found in major drug, food and mass merchandising retail chains in the United States, Europe, Japan and elsewhere. In addition, mail order and Internet sales are becoming increasingly important channels in major markets worldwide.

Eye care professionals are CIBA Vision's primary marketing focus. In addition, we have direct-to-consumer initiatives including free trials and coupons.

Competition

Contact Lenses

Growth in the contact lenses market is driven primarily by an increased demand for lenses and an increasingly varied product mix. As consumers move toward frequent replacement lenses, including one-day disposable lenses, demand for lenses is increasing. Additionally, the customer base is expanding with the development of new contact lens options, such as daily disposable, 30-night continuous wear, toric lenses for astigmatic patients and lenses to correct presbyopia, a condition prevalent among the "Baby Boom" generation. We are well-positioned in the contact lens market as the second-leading player on the basis of market share. CIBA Vision now has the broadest product portfolio of any competitor in the industry. The colored lens technology we acquired with Wesley Jessen also creates a strong combination with our CIBA Vision products that should prove attractive to women and teenagers, in particular. Other companies selling contact lenses are Bausch & Lomb and Johnson & Johnson.

Lens Care

We expect to increase our presence in the one-bottle market segment with our *SOLO-care* lens care product and to maintain a leading position in the peroxide category with *AOSept Clear Care* lens care, which is required by wearers of frequent replacement and conventional contact lenses, is a mature market and the products will continue to face competitive pressure due to the increasing preference for daily disposable and continuous wear lenses, which require little or no lens care.

CIBA Vision is a global leader in the peroxide lens care category with *AOSept*, although this is a declining segment of the market. Market segment share is increasing in the growing one-bottle market segment with our *SOLO-care*, *BLUE Sept* and *AOSept Clear Care* disinfection systems. Other companies selling lens care products are Alcon, Advanced Medical Optics and Bausch & Lomb.

Ophthalmic Surgical

The Ophthalmic Surgical market includes intraocular lenses and phaco equipment for cataracts, laser vision correction, surgical devices, surgical adjuncts and vitreo-retinal products. We are present in the cataract segment with our intraocular lens, CV232 SRE, which is a pre-folded, intraocular lens. We are the only company with a position in both the anterior and posterior phakic refractive lens market where we have acquired licenses. Phakic refractive lenses are used for patients requiring a high degree of correction. The *Ex-PRESS* mini glaucoma shunt is an innovative and minimally invasive approach for the treatment of glaucoma. It has been shown to reduce intraocular pressure up to 35% and can be completed five times faster than conventional glaucoma surgeries. Other companies selling ophthalmic surgical products are Alcon, Advanced Medical Optics, Bausch & Lomb, Pharmacia and Staar Surgical.

Research and Development

The research results of other Novartis affiliates provide CIBA Vision with new chemical compounds for future products and access to developments in biotechnology. These resources are complemented by CIBA Vision's internal research and development capabilities, licensing agreements and joint research and development partnerships with third parties (companies, individuals and universities). We invested CHF 109 million in research and development of eye care products in 2002, representing 6% of the Business Unit's sales.

We have long term research commitments totaling CHF 2 million in the aggregate as of December 31, 2002. We intend to fund these expenditures from internally generated resources.

Regulation

Contact lenses, surgical devices and lens care products are regulated as medical devices in the United States, the EU and Japan. These jurisdictions each have risk-based classification systems that determine the type of information which must be provided to the local regulators in order to obtain the right to market a product.

In the US, all devices must receive pre-market approval by the FDA. There are two review procedures to gain this pre-market approval: a pre-market application ("PMA") and a 510(k) submission. Under a PMA, the manufacturer must submit to the FDA supporting evidence sufficient to prove the safety and effectiveness of the device. The FDA has 180 days to review a PMA. Certain products, however, may qualify for a submission authorized by Section 510(k) of the US Food, Drug and Cosmetic Act. Under this procedure, the manufacturer gives the FDA a pre-market notification that it intends to commence marketing the product, and that it has established that the product is substantially equivalent to another product already on the market. The FDA has 90 days to review a 510(k) submission. In the US, no 30-day extended-wear lenses had previously existed on the market, so we are required to proceed under the PMA procedure. Ophthalmic surgical devices fall into both PMA or 510(k) categories depending on the availability of data from previously approved devices. Lens care products generally qualify for 510(k)

submission.

In the EU, the "CE" mark is required for all medical devices sold. CIBA Vision affiliates hold a CE mark for the classes of vision care medical devices that they sell. The CE mark allows CIBA Vision to market products upon signing a declaration of conformity with the EU's Medical Device Directive requirements, which CIBA Vision affiliates do for each product sold. In addition, medical device sales in the EU require auditing by a certified third party (a "Notified Body") to ensure that the manufacturer's quality systems are in compliance with the requirements of the ISO 9000 standards. CIBA Vision has two Notified Bodies which routinely audit the company's quality systems.

In Japan, contact lenses are categorized as medical devices and are subject to an approval process similar to that in the United States. Although there is an improvement in the willingness to accept foreign data and a movement toward harmonization of requirements, in order to enter the Japanese market, local clinical trials often are required and local protocols must then be observed. Lens care products for soft lenses take several years to gain approval due to the extensive amount of additional data and clinical testing required. Surgical devices are also categorized by risk level and a lengthy testing, review and approval process is required. Saline solutions for hard lenses are unregulated.

Intellectual Property

Our CIBA Vision business is brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

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Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

4.C Organizational Structure

The Novartis Group is a multinational group of companies specializing in research, development, manufacture, sales and distribution of innovative healthcare products. Novartis AG, our Swiss holding company, owns, directly or indirectly, 100% of all significant operating companies. For a list of our subsidiaries, see note 30 to the consolidated financial statements.

The Group is divided operationally into two Divisions: Pharmaceuticals and Consumer Health. Our Pharmaceuticals Division is organized into five Business Units: Primary Care, Oncology, Transplantation, Ophthalmics and Mature Products. The six Business Units of the Consumer Health Division are: Generics, OTC, Animal Health, Medical Nutrition, Infant & Baby and CIBA Vision. The Business Units coordinate the worldwide research, distribution, marketing and sales of the products assigned to each. Because the Business Units of the Pharmaceuticals Division have common long-term economic perspectives, common customers, common research, development, production and distribution practices, and a common regulatory environment, their financial data are not required to be separately disclosed.

4.D Property, Plants and Equipment

Our principal executive offices are located in Basel, Switzerland. Our Business Units operate through a number of affiliates having offices, research facilities and production sites throughout the world.

It is our policy to own our facilities. A few (mainly in the United States) are leased under long-term leases. Some of our principal facilities are subject to mortgages and other security interests granted to secure indebtedness to certain financial institutions. As of December 31, 2002, the total amount of indebtedness secured by these facilities was not material to the Group. We believe that our production plants and research facilities are well maintained and generally adequate to meet our needs for the foreseeable future.

The following table sets forth our major production and research facilities. For a further description of our material facilities, see " 4.B Business Overview," and the sections entitled " Production" and " Research and Development" included within the discussions of each of our business segments.

Location/Division or Business Unit	Size of Site	Major Activity
Major Production facilities:		
Pharmaceuticals		
Taboão da Serra, Brazil	539,000 square meters	Suppositories, capsules, tablets, syrups, suspensions, creams, drop solutions, powders
Ringaskiddy, Ireland	532,000 square meters	Drug substances, intermediates
Basel, Switzerland Klybeck	283,000 square meters	Drug substances, intermediates
Basel, Switzerland St. Johann	219,000 square meters	Drug substances, intermediates
Basel, Switzerland Schweizerhalle	213,000 square meters	Drug substances, intermediates
Stein, Switzerland	460,000 square meters	Steriles, tablets, capsules, transdermals, intermediates
Grimsby, United Kingdom	929,000 square meters	Drug substances, intermediates
Suffern, NY (United States)	656,000 square meters	Tablets, capsules, transdermals
Horsham, United Kingdom	112,000 square meters	Tablets, capsules
Wehr, Germany	165,000 square meters	Tablets, creams, ointments
Torre, Italy	210,000 square meters	Tablets
Barbera, Spain	51,000 square meters	Tablets, capsules
Huningue, France	70,000 square meters (Pharmaceuticals and Animal Health facilities)	Suppositories, liquids, solutions, suspensions
Sasayama, Japan	104,000 square meters	Suppositories, capsules, tablets, syrups, suspensions, creams, drop solutions, powders
Generics		
Kundl, Austria	266,000 square meters total area (production and R&D facilities)	Biotech products, intermediates, active drug substances, final steps (finished pharmaceuticals)
Broomfield, CO (United States)	60,000 square meters	Broad range of finished dosage forms

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Nyon, Switzerland	58,400 square meters (production and R&D facilities)	Liquids and creams
Lincoln, NE (United States)	44,870 square meters	Liquids, creams and tablets
Animal Health		
WUSI-Farm, China	42,000 square meters	Insecticides, antibacterials, acaricides, powders
Dundee, Scotland	34,000 square meters	Packaging, formulation liquids, solids, creams, sterile filling vaccines
Larchwood, IA (United States)	29,700 square meters (production and R&D facilities)	Veterinary immunologicals
Medical Nutrition		
Minneapolis, MN (United States)	33,500 square meters (production and R&D facilities)	Medical nutrition products
Osthofen, Germany	44,000 square meters (production and R&D facilities)	Medical nutrition and Nutrition & Santé products
Infant & Baby		
Fremont, MI (United States)	107,000 square meters (production and R&D facilities)	<i>Gerber</i> jarred baby food, fruit and vegetable juices, dry boxed cereal
Fort Smith, AR (United States)	80,451 square meters	<i>Gerber</i> jarred baby food, dry cereal
Querétaro, Mexico	205,000 square meters	<i>Gerber</i> jarred baby food, fruit and vegetable juices, dry canned and bagged cereal
Reedsburg, WI (United States)	30,000 square meters	Baby Care products; spill-proof cups, bottles, nipples, breast pads, pacifiers, overcaps
Rzeszow, Poland	45,000 square meters	<i>Gerber</i> baby food, fruit juice
CIBA Vision		
Pulau Batam, Indonesia	16,700 square meters	Contact lenses
Duluth, GA (United States)	16,700 square meters	Contact lenses
Des Plaines, IL (United States)	26,940 square meters	<i>Freshlook</i> product line
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Grosswallstadt, Germany	19,000 square meters	Contact lenses
Cidra, Puerto Rico	124,000 square meters	Contact lenses

Toronto, Canada	145,000 square meters	LCP production
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Major Research and Development facilities:

Pharmaceuticals

East Hanover, NJ (United States)	135,591 square meters	General pharmaceutical products
Summit, NJ (United States) ⁽¹⁾	66,242 square meters	General pharmaceutical products
Cambridge, MA (United States)	22,500 square meters	General pharmaceutical products (as of March 1, 2003)
Basel, Switzerland Klybeck	283,000 square meters	General pharmaceutical products
Basel, Switzerland St. Johann	219,000 square meters	General pharmaceutical products
Vienna, Austria	39,000 square meters	Dermatology and infectious diseases
Tsukuba, Japan	20,600 square meters	General pharmaceutical products
Horsham and London, UK	37,700 square meters	Respiratory and nervous system diseases

Generics

Kundl, Austria	266,000 square meters total area (production and R&D facilities)	Biotech processes, innovations in antibiotic technologies
Kolshet, India	5,000 square meters	Generic pharmaceuticals
Dayton, NJ (United States)	29,000 square meters	Generic pharmaceuticals

OTC

Nyon, Switzerland	58,400 square meters (production and R&D facilities)	Over the counter medicine products
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Animal Health

St. Aubin, Switzerland	9,000 square meters	Parasiticides
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⁽¹⁾ The Summit, NJ site has been sold to a third party. We have leased the site back from the buyer until March 2003. All site operations will be moved to other Group sites prior to that date.

Larchwood, IA (United States)	29,700 square meters (production and R&D facilities)	Veterinary immunologicals development
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Medical Nutrition

Minneapolis, MN (United States)	33,500 square meters (production and	Medical nutrition products
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R&D facilities)

Osthofen, Germany	44,000 square meters (production and R&D facilities)	Medical nutrition and Nutrition & Santé products
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Infant & Baby

Fremont, MI (United States)	107,000 square meters (production and R&D facilities)	Baby food products
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CIBA Vision

Duluth, GA (United States)	9,000 square meters	Vision-related medical devices
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On May 6, 2002, we announced the establishment of the Novartis Institutes for BioMedical Research, Inc. (NIBRI) in Cambridge, Massachusetts. This new research facility will initially provide 22,500 square meters of lab and office space for 400 scientists and technology experts, and will subsequently be expanded to provide lab and office space for 900 scientists and technology experts. Our initial investment in this new facility is approximately US\$250 million (approximately CHF 350 million).

On August 15, 2002, we announced plans to expand our UK and Swiss production facilities for manufacturing *Diovan* (valsartan), in order to boost *Diovan* production by 300 tons per year. We plan to invest approximately CHF 380 million in this project, of which approximately CHF 320 million will be used to construct a new building at our Grimsby, UK production facility, and approximately CHF 60 million will be used to expand an existing production unit at our Schweizerhalle facility outside Basel, Switzerland.

Environmental Matters

We integrate core values of environmental protection into our business strategy to add value to the business, manage risk and enhance our reputation.

We are subject to laws and regulations concerning the environment, safety matters, regulation of chemicals and product safety in the countries where we manufacture and sell our products or otherwise operate our business. These requirements include regulation of the handling, manufacture, transportation, use and disposal of materials, including the discharge of pollutants into the environment. In the normal course of our business, we are exposed to risks relating to possible releases of hazardous substances into the environment which could cause environmental or property damage or personal injuries, and which could require remediation of contaminated soil and groundwater. Under certain laws, we may be required to remediate contamination at certain of our properties regardless of whether the contamination was caused by us, or by previous occupants of the property.

We believe that we are in substantial compliance with environmental, health and safety requirements applicable to us. We are committed to providing safe and environmentally sound workplaces that will not adversely affect the health or environment of employees or the communities in which we operate. We believe that we have obtained all material environmental permits required for the operation of our facilities as well as all material authorizations required for the products produced by us. We believe that we are not currently subject to liabilities for non-compliance with applicable environmental, health and safety laws that would materially and adversely affect our business, financial condition or results of operations. However, there is a risk that legislation enacted in the future could create liabilities for past activities undertaken in compliance with then-current laws and regulations or that there is environmental or other damage of which we are not aware.

In recent years, the operations of all companies have become subject to increasingly stringent legislation and regulation related to occupational safety and health, product registration and environmental protection. Such legislation and regulations are complex and constantly changing, and there can be no assurance that future changes in laws or regulations would not require us to install additional controls for certain of our emission sources, to undertake changes in our manufacturing processes or to remediate soil or groundwater contamination at facilities where such clean-up is not currently required. Some of our facilities are over 50 years old, and there may be soil and groundwater contamination at such facilities. However, based on current information, we do not believe that expenditures related to such possible contamination, beyond those already accrued, will be significant.

Our expenditures, excluding Agribusiness, related to capital investments for environmental, health and safety compliance measures were approximately CHF 53 million in 2002 (CHF 11 million for environment), CHF 56 million in 2001 (CHF 12 million for environment), and

CHF 55 million in 2000 (CHF 20 million for environment). While we cannot predict with certainty our aggregate capital environmental investments in 2003, based on current information and existing assets, we estimate that such aggregate expenditures will be comparable to the 2002 figure.

It is difficult to estimate the future costs of environmental protection and remediation because of many uncertainties, including uncertainties about the state of laws, regulations and information related to individual locations and sites. However, given our experience to date regarding environmental matters and the facts currently known, we believe that compliance with existing and known national and local environmental laws and regulations will not have a material effect on our total capital expenditures, earnings or competitive position.

Item 5. Operating and Financial Review and Prospects

5.A Operating Results

The following operating and financial review and prospects should be read in conjunction with our consolidated financial statements included in this Form 20-F. The consolidated financial statements and the financial information discussed below have been prepared in accordance with IAS. For a discussion of the significant differences between IAS and US GAAP, see "Item 18. Financial Statements note 31."

Overview

We are a world leader both in sales and in innovation in our continuing core businesses: pharmaceuticals and consumer health, which includes generics, OTC self-medication, animal health, medical nutrition, infant and baby foods and products, and eyecare products, with global sales of CHF 32.4 billion in 2002. We aim to hold a leadership position in all of our businesses.

Novartis AG was formed in 1996 out of a merger of two global participants in the pharmaceutical and agrochemical industries, Sandoz AG and CIBA-Geigy AG. Accounting for the merger under IAS was based on a uniting of interests and therefore did not result in any goodwill nor in any goodwill

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amortization. Under US GAAP, the merger is accounted for as a purchase of CIBA-Geigy AG by Sandoz AG. For a discussion of the significant differences between IAS and US GAAP purchase accounting, see "Item 18. Financial Statements note 31." In November 2000, we spun-off our Crop Protection and Seeds businesses and merged them with AstraZeneca's Zeneca Agrochemicals to create Syngenta. Pre-spinoff sales from these business are shown as "Sales from discontinued Agribusiness activities."

Factors affecting results

The global healthcare market is growing rapidly due to, among other reasons, the aging population in developed countries, unmet needs in many therapeutic areas (such as cancer and cardiovascular disease), the adoption of more industrialized lifestyles in emerging economies, and increased consumer demand fuelled by broad and rapid access to information. At the same time, the healthcare industry is under increasing pressure to reduce prices as payors in the public and private sectors seek to curb rising healthcare costs.

Our revenues are directly related to our ability to identify high potential products while they are still in development and to bring them to market quickly and effectively. Efficient and productive research and development is crucial in this environment as we, like our competitors, search for efficacious and cost-efficient pharmaceutical solutions to health problems. The need for increased resources in order to take advantage of the full range of new research and development technologies has been among the reasons for the consolidation which has taken place across the industry, and for the increase in collaborations between leading companies and niche players at the forefront of their particular technology areas. The growth in new technology, particularly genomics, will almost certainly have a fundamental impact on the pharmaceutical industry as a whole, and upon our future development.

In addition, competitive conditions have intensified as a result of regulation, price reductions, reference prices, parallel imports, higher patient co-payments and increased pressure on physicians to limit prescribing. Pressure on our and other pharmaceutical companies to lower prices is expected to increase primarily as a result of government initiatives to reduce patient reimbursement, restrict prescribing levels, increase the use of generics and impose overall price cuts. The introduction of technologically innovative products and devices by competitors and growing parallel imports, mainly in the EU, pose additional challenges.

Exchange rate exposure also affects our results as we have both sales and costs in many currencies other than the Swiss franc. This gives rise to both transaction exposure in subsidiary financial statements due to foreign currency denominated transactions and translation exposure from converting foreign subsidiary results and balance sheets into our Swiss franc consolidated financial statements. Our results have not been significantly affected by inflation. See "Exchange Rate Exposure and Risk Management" below.

Critical Accounting Policies

Our principal accounting policies are set out in note 1 of our consolidated financial statements and conform with International Accounting Standards (IAS). Significant judgments and estimates are used in preparation of the consolidated financial statements which, to the extent that actual outcomes and results may differ from these assumptions and estimates, could affect the accounting in at least the following areas:

Long-lived assets, including identifiable intangibles and goodwill, are regularly reviewed for impairment whenever events or changes in circumstance indicate that the balance sheet carrying amount of the asset may not be recoverable. In order to assess if there is any impairment, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposition. If the balance sheet carrying amount of the asset is more than the greater of its value in use to us or its net selling price, then an impairment loss for the difference is recognized. Actual outcomes could vary significantly from such estimates of discounted future cash flow. Factors such

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as changes in the planned use of buildings, machinery or equipment, or closing of facilities or lower than anticipated sales for products with capitalized rights could result in shortened useful lives or impairment.

We have extensive investments in marketable securities and have significant derivative financial instrument positions which are mainly, but not exclusively, held for hedging underlying positions. Under current IAS accounting rules unrealized gains and losses on marketable securities and cash flow-related derivative financial instruments that qualify for hedge accounting are recorded in separate components of equity and not in the income statement. Our management regularly reviews such positions to determine the extent to which unrealized losses are temporary. Depending on the stock market and other factors at the time of this review it may be necessary to treat certain of the unrealized losses as permanent and transfer these losses out of the equity component into our income statement. Prior to January 1, 2001, our policy on accounting for derivative instruments which were not considered to be hedges was to value them at the lower of cost on inception and fair value on a portfolio basis. A net unrealized loss was included in the current year's result. A net unrealized gain was not recorded. Prior to January 1, 2001, our policy on accounting for derivative financial instruments which were considered to be hedges was very similar to IAS 39 requirements, although the conditions for hedge effectiveness were less strict. Prior to January 1, 2001, our accounting policy was that marketable securities were carried at the lower of cost or market and unrealized losses were included as financial income, net in the income statement.

We have investments in associated companies (generally investments of between 20% and 50% of a company's voting shares) that are accounted for by using the equity method. Due to the various estimates that have been made in applying the equity method, the amounts recorded in the consolidated financial statements in respect of Roche Holding AG and Chiron Corporation may require adjustments in the following year as more financial and other information becomes publicly available.

We sponsor pension and other retirement plans in various forms covering employees who meet eligibility requirements. These plans cover the majority of our employees. Several statistical and other factors which attempt to anticipate future events are used in calculating the expense and liability related to the plans. These factors include assumptions about the discount rate, expected return on plan assets and rate of future compensation increases, as determined by our management within certain guidelines. In addition, our actuarial consultants also use statistical information such as withdrawal and mortality rates to estimate these factors. The actuarial assumptions used may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants. These differences may result in a significant impact to the amount of pension income or expense recorded in future years.

We have provisions for environmental remediation costs. The material components of the environmental provisions consist of a risk assessment based on investigation of the various sites. Future remediation expenses are affected by a number of

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uncertainties which include, but are not limited to, the method and extent of remediation, the percentage of waste material attributable to us at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties. Our management believes that such costs will not materially affect our consolidated financial position, results of operations or cash flow.

A number of our affiliates are the subject of litigation arising out of the normal conduct of their business. As a result, claims could be made against them which, in whole or in part, might not be covered by insurance. In our opinion, however, the outcome of these actions will not materially affect our financial position, results of operations or cash flow.

In 2002, we continued to amortize goodwill under IAS even though for US GAAP purposes we ceased to amortize goodwill in accordance with Statement of Financial Accounting Standards

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("SFAS") No. 142 "*Goodwill and Other Intangible Assets*." SFAS 142 requires us to perform an annual review of our US GAAP goodwill for impairment. We intend to perform a similar review of our IAS goodwill. We currently do not expect a material future impairment charge. However, there can be no assurance that at the time the review is completed a material impairment charge will not be recorded.

The International Accounting Standards Board is entering a period of critically examining current International Accounting Standards with a view to increasing international harmonization of accounting rules. This process of amendment and convergence of worldwide accounting rules could result in significant amendments to the existing rules within the next two years in such areas as the timing of recognition of sales and other revenues arising from collaborative agreements with marketing and distribution partners, accounting for share based compensation, goodwill and intangibles, employee benefit plans, marketable securities and derivative financial instruments and classification of balance sheet positions as debt or equity.

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Results of Operations

The following table sets forth selected income statement data for each of the periods indicated.

	2002	2001 ⁽²⁾	2000 ⁽²⁾
	(CHF millions)	(CHF millions)	(CHF millions)
Sales to third parties			
Pharmaceuticals	21,002	20,181	18,150
Generics	2,809	2,433	1,973
OTC ⁽³⁾	2,359	2,538	2,483
Animal Health	971	962	1,083
Medical Nutrition (including Nutrition & Santé) ⁽³⁾	1,109	1,115	1,136
Infant & Baby ⁽³⁾	2,075	2,227	2,108
CIBA Vision	1,762	1,787	1,392
Consumer Health ongoing	11,085	11,062	10,175
Divested Health & Functional Food activities	325	400	377
Consumer Health	11,410	11,462	10,552

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	2002	2001 ⁽²⁾	2000 ⁽²⁾
Sales from continuing activities	32,412	31,643	28,702
Sales from discontinued Agribusiness activities ⁽¹⁾			6,693
Group sales	32,412	31,643	35,395
Sales	32,412	31,643	28,702
Cost of goods sold	(7,618)	(7,886)	(7,316)
Marketing and distribution	(10,987)	(10,703)	(9,146)
Research and development	(4,339)	(4,189)	(4,011)
Administration and general overheads	(1,581)	(1,588)	(1,502)
Operating income from continuing activities	7,887	7,277	6,727
Operating income from discontinued Agribusiness activities ⁽¹⁾			1,156
Group Operating income	7,887	7,277	7,883
Operating income by Division/Business Unit			
Pharmaceuticals	6,022	5,677	5,401
Generics	406	281	242
OTC ⁽³⁾	374	452	424
Animal Health	144	138	179
Medical Nutrition (including Nutrition & Santé) ⁽³⁾	6	87	66
Infant & Baby ⁽³⁾	355	388	371
CIBA Vision	183	174	100
Consumer Health ongoing	1,468	1,520	1,382
Divested Health & Functional Food activities	216	(7)	8
Consumer Health	1,684	1,513	1,390
Corporate and other income/expense	181	87	(64)
Operating income from continuing activities	7,887	7,277	6,727
Income from associated companies	(10)	139	97
Financial income, net	949	1,067	1,216
Taxes	(1,490)	(1,440)	(1,504)
Minority interests	(23)	(19)	(25)
Net income from continuing activities	7,313	7,024	6,511
Operating income, income from associated companies, financial income, taxes and minority interest of discontinued Agribusiness sector ⁽¹⁾			699
Group net income	7,313	7,024	7,210

(1) Agribusiness: Crop Protection and Seeds businesses.

(2) 2001 and 2000 figures have been restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million in 2001 and CHF 410 million in 2000.

(3)

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2001 and 2000 figures reported the results of OTC, Medical Nutrition (including Health and Functional Foods) and Infant & Baby together under the name Consumer Health. These businesses have now been separated into the OTC, Medical Nutrition (including Nutrition & Santé) and Infant & Baby Business Units.

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2002 Compared to 2001

Overview

The following compares our results in the year ended December 31, 2002 to those of the year ended December 31, 2001. In 2001 the results of the OTC, Medical Nutrition (including Health and Functional Foods) and Infant & Baby businesses were reported together under the name Consumer Health. These businesses have now been separated into the OTC, Medical Nutrition (including Nutrition & Santé and the Food & Beverage business through its divestment in 2002) and Infant & Baby Business Units. Due to new accounting rules, 2001 sales have been restated to reflect a change in the classification of certain sales incentives and discounts to retailers. This restatement amounted to a sales reduction of CHF 395 million in 2001, with a corresponding reduction in Marketing and Distribution expenses.

In Swiss francs, our sales in 2002 increased by 2% over 2001 to CHF 32.4 billion (+11% in local currencies); operating income grew by 8% to CHF 7.9 billion; net income increased by 4% to CHF 7.3 billion and free cash flow (excluding acquisitions of subsidiaries and the voting shares of Roche Holding AG) rose by 10% in Swiss francs to CHF 4.5 billion.

Pharmaceuticals accounted for 65% of the Group's total sales and Consumer Health 35%. The two Divisions generated 76% and 24% of the Group's total operating income, respectively. In 2002, the Consumer Health Division was reorganized to include our Generics, OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition & Santé unit), Infant & Baby, and our CIBA Vision Business Units.

Geographically, 47% of sales were generated in the NAFTA region (43% in the USA), 33% in Europe and 20% in the rest of the world.

Sales growth was driven by a volume increase of 10%. All Business Units except Generics and CIBA Vision benefited from small price increases which in total amounted to 1%. The sales increase due to acquisitions was negligible. The sales performance in Swiss francs suffered from a 9% negative currency effect as the Swiss franc rose on average 8% against the US dollar, 10% against the yen and 3% against the Euro.

Our operating margin in 2002 was 24.3% of sales, an increase of 1.3% percentage points over the 23.0% of sales of the previous year. Productivity gains and improvements in the product mix lead to a 3% reduction in the cost of goods sold, while marketing and distribution expenses increased by 3%, slightly more than sales, to support product launches and key growth drivers.

Research and development investments were increased 4% mainly due to the new Pharmaceuticals Division research strategy and the establishment of our new facility in Cambridge, USA.

As a result of all these factors, operating income increased overproportionally, climbing 8% in Swiss francs to CHF 7.9 billion.

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Sales

The following table sets forth selected sales data for each of the periods indicated.

	Year ended December 31,		Change in CHF	Change in local currencies
	2002	2001 ⁽¹⁾		
	(CHF millions)	(CHF millions)	(%)	(%)
Sales				
Pharmaceuticals	21,002	20,181	4	13

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Year ended December 31,

Generics	2,809	2,433	15	25
OTC ⁽²⁾	2,359	2,538	(7)	(1)
Animal Health	971	962	1	10
Medical Nutrition (including Nutrition & Santé) ⁽²⁾	1,109	1,115	(1)	4
Infant & Baby ⁽²⁾	2,075	2,227	(7)	3
CIBA Vision	1,762	1,787	(1)	6
Consumer Health ongoing	11,085	11,062	0	6
Divested Health & Functional Food activities	325	400		
Consumer Health	11,410	11,462	0	7
Group sales	32,412	31,643	2	11

(1) Restated to reflect the reclassification of certain sales incentives and discounts to retailers. In 2001, sales have been reduced by a total of CHF395 million (CHF129 million for OTC, CHF50 million for Medical Nutrition and CHF216 million for Infant & Baby) with a corresponding reduction in marketing and distribution expenses.

(2) 2001 figures reported the results of OTC, Medical Nutrition (including Health and Functional Foods) and Infant & Baby together under the name Consumer Health. These businesses have now been separated into the OTC, Medical Nutrition (including Nutrition & Santé) and Infant & Baby Business Units.

Pharmaceuticals Division

Sales increased 4% in Swiss francs or 13% in local currencies from CHF 20.2 billion in 2001 to CHF 21.0 billion in 2002, driven in particular by the cardiovascular and oncology businesses, where *Diovan*, *Lotrel*, *Lescol*, *Gleevec/Glivec*, *Zometa* and *Sandostatin* were the main growth drivers. The introduction of new products, such as *Elidel*, *Zometa* and *Zelnorm/Zelmac*, together with the addition of new strengths and new indications to existing brands all contributed to lifting sales.

Double-digit sales growth in local currencies was achieved in all regions, including Japan despite government mandated price decreases. In Europe, strong performances in Spain and France offset the effects of pricing pressures in several countries, mandatory generic substitution in Germany, and the effects of parallel imports.

Diovan (hypertension) posted sales of CHF 2.6 billion, making it our best selling product ever. Extending its leadership of the angiotensin-2 receptor blocker category in the US, it became the first and only drug of its kind to receive approval there for treatment in heart failure patients. To add further choice and flexibility, a new higher dose (160/25) formulation of *Co-Diovan* was launched in the US. Our second flagship anti-hypertensive, *Lotrel*, generated sales of CHF 1.0 billion, lifted by the July launch of a new formulation (10 mg amlodipine + 20 mg benazepril HCl).

The third main pillar of the cardiovascular franchise, *Lescol* (cholesterol reduction), posted sales of CHF 896 million. The brand's strong growth in Europe and other regions has been driven by its particularly favorable risk/benefit profile and convenient XL extended-release formulation.

In Oncology, *Gleevec/Glivec* gained approval in the US, the EU and Japan for first-line use in treating certain forms of chronic myeloid leukemia (CML). It also received approval early in the year for use in gastrointestinal stromal tumors (GIST). Exceeding expectations, *Gleevec/Glivec* sales reached CHF 953 million, making it our fifth biggest-selling product. Another leading Oncology brand, *Sandostatin*

continued to post substantial double-digit growth, with sales reaching CHF 943 million, despite the launch of generic competitors in Europe. *Zometa* (bone metastases and complications of a broad range of cancers) achieved sales of CHF 758 million. *Zometa* is the more potent and convenient successor to *Aredia*, which is facing patent expiry. The new drug gained EU and US approvals for a broader range of cancer settings, and is approaching or has exceeded the previous sales level of *Aredia* in many markets.

In Transplantation, the *Neoral* franchise was underpinned by market share gains in Japan and yielded sales of CHF 1.6 billion. It continues to compete strongly against branded and generic competition owing to a reluctance among physicians to switch patients who are stable and doing well on *Neoral*.

The Mature Products business continued to report only a modest decline in sales on a comparable basis as a result of focused investments on selected key products and markets. Of the leading brands, the anti-inflammatory *Voltaren* continued to compete well against generics and the COX-2 inhibitor class of drugs and achieved sales of CHF 925 million.

Overall, the Pharmaceuticals Division's top ten products generated CHF 11.7 billion, reflecting an increase of 32% in local currencies, while the top twenty products expanded sales by 17% in local currencies to CHF 16.4 billion. Unless otherwise indicated, all percentages set forth in the following section refer to local currencies.

Primary Care

Primary care sales grew 13% in local currencies (+5% in CHF) primarily due to strong sales growth of *Diovan* and the other key products discussed below.

Diovan (+49%, US: +40%; hypertension) became our best selling product ever, further extending its category leadership in the US to more than 35% of total angiotensin II receptor blocker prescriptions. Backed by the Val-Heft study data showing improved survival, reduced hospitalization and cost effectiveness benefits, *Diovan* became the first and only drug of its kind to receive approval for treatment in heart failure patients. To complement the broad choice and flexibility for patients and physicians, a new higher dose (160/25) formulation of *Co-Diovan* was launched in the US.

Lotrel (35% US: +35%; hypertension), also extended its share of new prescriptions. A new formulation (10 mg amlodipine +20 mg benazepril HCl) was launched in July and has been well received by physicians and patients, reflecting the fact that 90% of *Lotrel* patients achieve their blood pressure goal with the additional benefits of an ACE inhibitor.

Lescol (+18%, US: +13%; cholesterol reduction) sales grew strongly in Europe and in other regions, reflecting the drug's particularly favorable risk/benefit profile and convenient XL extended-release formulation. Following the publication of data showing that *Lescol* reduced the risk of serious cardiac events after surgery to unblock coronary arteries, a new indication in angioplasty patients was filed in August for regulatory approval in the US.

Lamisil (+4%, US: 3%; fungal infections) sales picked up towards the end of the year mainly in the US. While the onychomycosis market segment has been declining, *Lamisil* has extended its commanding share of both total and new prescriptions in the US to more than 80% in 2002.

Elidel (eczema) was launched in 13 countries, including the US, and completed the mutual recognition procedure in Europe. Sales in 2002 reached CHF 148 million. Within just six months, this highly effective, non-steroid cream has become the number one branded topical treatment for eczema in the US, where it has captured over 8% of new prescriptions. In Denmark, the first

country in Europe where it has been launched, *Elidel* captured a 9% share of its segment within 10 weeks of launch.

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Exelon (+26%, US: +28%; Alzheimer's disease) posted good sales growth and captured a further share both of new and total prescriptions in the US. New marketing initiatives are under way to counter increased competition in its fast-growing segment. Studies revealed that *Exelon* inhibits an additional enzyme (butyrylcholinesterase) that contributes to neurological dysfunction in Alzheimer's disease. As a result, an expanded labeling was approved in Europe to include the product's unique dual inhibition properties.

Zelnorm/Zelmac (irritable bowel syndrome with constipation) has now gained approval in 28 countries including the US where it was launched in September. With progress being made on reimbursement, 2002 sales totaled CHF 70 million.

Oncology

Our Oncology business unit gained further market share and posted strong sales growth of 28% in local currencies (+19% in CHF).

Gleevec/Glivec, for treating certain forms of chronic myeloid leukemia (CML) and gastrointestinal stromal tumors (GIST), continued to bring benefits to thousands of patients in more than 80 countries. Exceeding expectations, 2002 sales reached CHF 953 million, making it our fifth biggest selling product. *Gleevec/Glivec* obtained approval as first-line treatment in the US, EU and Switzerland, and major progress was achieved on reimbursement, especially in the UK, Australia and New Zealand.

Zometa (complications of a broad range of cancers), launched in 2002, achieved sales of CHF 758 million, making it the world's fastest growing bisphosphonate used for bone metastases. More potent and convenient than *Aredia*, *Zometa* has gained EU and US approvals for a broader range of cancer settings, and is approaching or has exceeded the previous sales level of *Aredia* in many markets.

Aredia (bone metastases; 64%; US: 84%) sales reflect the successful launch and superiority of *Zometa* and the anticipated competition from multiple generic entrants in several markets.

Sandostatin continued to post substantial double-digit growth, with sales up 23% (US: +39%) to CHF 943 million despite the launch of generic competitors in Europe. Growth was driven by sustained market penetration of the convenient, long-acting, once-a-month "LAR" formulation.

Femara, the first-line therapy for advanced breast cancer in postmenopausal women, posted a 37% (US: +55%) rise in sales to CHF 271 million. *Femara* is the US leader in the first-line metastatic breast cancer setting.

Ophthalmics

Ophthalmics' sales rose 7% in local currencies (1% in CHF), driven by *Visudyne*.

Visudyne (+27%; US: +19%; treatment in macular degeneration) posted sales of CHF 443 million, and has now been approved in more than 65 countries for its main indication and in more than 45, including the EU, US and Canada, for additional indications.

Transplantation

Sales decreased 4% in local currencies (11% in CHF) as a result of branded and generic competition to the *Neoral* franchise. Their impact however continues to be limited by the importance physicians attach to avoiding fluctuations in drug concentrations in patients who are stable and doing well on *Neoral*.

Neoral/Sandimmun, sales (- 5%; US: - 12%) were underpinned by market share gains in Japan, which partly offset price pressures and branded competition in other regions.

Simulect, the induction immunosuppressant designed to complement *Neoral*, posted a 21% rise in sales (US: +4%) following its successful launch in Japan and continued market segment share gains from established competitor brands in most regions.

Myfortic, a new formulation for preventing organ rejection in kidney transplantation, gained first approvals in Switzerland, Brazil, India and Australia, while *Certican*, a novel drug intended for use in combination with *Neoral* and corticosteroids to prevent rejection episodes in patients with kidney transplants, was submitted for approval in the EU and US.

Mature Products

The mature brands reported a 10% sales rise in local currencies (no increase in CHF) due to a switch of products into this Business Unit and as a result of focused investments on selected key products and markets.

Voltaren (- 3%, US: - 18%; anti-inflammatory) continued to compete well against generics and the COX-2 inhibitor class of drugs.

Cibacen/Lotensin/Cibadrex (antihypertensive) continued to deliver positive results as sales climbed 9% (US: +14%) mainly as a result of renewed external field-force support in the US.

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Top 20 Pharmaceutical Products 2002

Brands	Therapeutic Area	United States	% change in local currencies	Rest of the World	% change in local currencies	Total	% change	
							in CHF	in local currencies
		(CHF m)		(CHF m)		(CHF m)		
<i>Diovan/Co-Diovan</i>	Hypertension	1,212	40	1,368	58	2,580	37	49
<i>Neoral/Sandimmun</i>	Transplantation	426	(12)	1,181	(2)	1,607	(12)	(5)
<i>Lamisil</i> (group)	Fungal infections	653	(3)	702	12	1,355	(4)	4
<i>Lotrel</i>	Hypertension	1,011	35			1,011	24	35
<i>Gleevec/Glivec</i>	Chronic Myeloid Leukemia	330	103	623	741	953	271	303
<i>Sandostatin</i> (group)	Acromegaly	439	39	504	12	943	16	23
<i>Voltaren</i> (group)	Inflammation/pain	18	(18)	907	(3)	925	(13)	(3)
<i>Lescol</i>	Cholesterol reduction	405	13	491	23	896	10	18
<i>Zometa</i>	Cancer complications	562	NA	196	NA	758	NA	NA
<i>Cibacen/Lotensin/Cibadrex</i>	Hypertension	523	14	191	(4)	714	1	9
Top ten products		5,579	35	6,163	28	11,742	22	32
<i>Miacalcic</i>	Osteoporosis	371	(9)	241	(4)	612	(13)	(7)
<i>Tegretol</i> (incl. CR/XR)	Epilepsy	189	(22)	376	1	565	(17)	(8)
<i>Leponex/Clozaril</i>	Schizophrenia	186	(12)	315	8	501	(7)	0
<i>Exelon</i>	Alzheimer's disease	259	28	213	24	472	17	26
<i>Visudyne</i>		259	19	184	40	443	18	27

							% change
	Wet form of age-related macular degeneration						
HRT Range	Hormone Replacement	215	5	222	(10)	437	(10)
Trileptal	Epilepsy	331	111	102	49	433	73
Aredia	Cancer complications	125	(84)	303	(27)	428	(66)
Foradil	Asthma	36	136	371	4	407	4
Famvir	Viral Infections	244	17	99	7	343	6
Top twenty products		7,794	15	8,589	19	16,383	9
Rest of portfolio		1,120	(6)	3,499	0	4,619	(9)
Total		8,914	12	12,088	13	21,002	4

NA Not applicable as no or insignificant prior year sales.

Consumer Health Division

Sales of the Consumer Health Division increased in local currencies by 7%, however, fell slightly in Swiss franc terms from CHF 11.5 billion in 2001 to CHF 11.4 billion in 2002. The following are specific comments on the results of the Business Units within the Consumer Health Division:

Generics

Sales rose 15% in Swiss francs or 25% in local currencies to CHF 2.8 billion, led by the US and Europe, the launch of new products, and expansion into new markets.

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The Generic Pharmaceuticals Business with finished forms lifted sales by 35% in local currencies, driven by the US performance and new launches, in particular the US launch of amoxicillin/potassium clavulanate, Geneva's generic form of the anti-infective Augmentin®. The introduction of other products, including mefloquine (malaria), nabumetone (inflammation), metformin (diabetes), fluoxetine (depression), lisinopril and lisinopril HCTZ (hypertension) also fuelled growth.

Sales in Europe grew dynamically, particularly in France, Italy and the Netherlands, due to several launches including the ulcer treatment omeprazole.

The Industrial Business franchise posted an increase of 1% in Swiss francs and a 3% increase in local currencies. A new Biopharmaceuticals Business franchise was added, focused on the manufacture of active ingredients, mostly modern recombinant products.

In November, our Business Unit successfully completed its friendly take-over bid for Lek Pharmaceuticals d.d., Slovenia's leading drug-maker. The CHF 1.3 billion acquisition opens up a leading position for our Generics business in Central and Eastern Europe, and in the countries of the former Soviet Union. No sales have been recorded from this acquisition in 2002 due to the fact that the acquisition closed late in the year (resulting in immaterial post-closing sales) and the fact that we are still in the process of integrating Lek into our reporting systems.

OTC

Sales were 7% off their 2001 level in Swiss francs or down 1% in local currencies. Excluding terminated, acquired, in-licensed and transferred businesses, the underlying sales growth was 3% in local currencies, driven by the key brands *Lamisil* (antifungal), *Voltaren Emulgel* (analgesic), *Otrivin* (nasal decongestant) and *Nicotinell/Habitrol* (smoking cessation). These products compensated for the weak cough and cold season in the US earlier in 2002 and a drop in *Calcium Sandoz* sales resulting from reimbursement issues in Europe and Mexico.

Animal Health

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Sales were up 1% in Swiss francs or 10% in local currencies to CHF 971 million, driven by double-digit growth in Latin America and the US, where the vaccine businesses acquired in January were the main contributors. Overall, acquisitions contributed approximately 6 percentage points to local currency sales growth.

The companion animal franchise was driven by strong sales of *Interceptor* (worm treatment) and *Fortekor* (cardio-renal drug), complemented by a number of new launches in key markets, including *Atopica*, for atopic dermatitis in dogs, and *Deramaxx*, the first COX-2 product for pain control in dogs, and *Milbemax*, for intestinal parasites in cats and dogs.

Sales in the farm animal franchise were driven by the therapeutic anti-infectives, the strong performance in Latin America, and the recovery in the UK from the foot and mouth epidemic of 2001.

The acquisition of Grand Laboratories and ImmTech in the US boosted the vaccines and aquahealth franchise, which delivered a strong rise in sales and now represents 8% of Animal Health's revenues.

Medical Nutrition (including Nutrition & Santé)

Combined sales reached CHF 1.1 billion, down 1% in Swiss francs but up 4% in local currencies. Double digit growth in Europe lifted Medical Nutrition sales, which were driven by the strong performance of Enteral Nutrition (*Isosource* and *Novasource*) and additional sales impetus from the Medical Food franchise (*Resource*).

In Nutrition & Santé, sales growth from the core-brands offset the impact of distributor changes in China and Italy, while Sports Nutrition sales were lifted by the introduction of *Isostar* "Fast Hydration".

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Within Medical Nutrition the Health Food & Slimming and Sports Nutrition businesses are regrouped as of January 1, 2003 into the new Nutrition & Santé stand-alone unit to optimize its business potential and to prepare for future divestment.

Infant & Baby

Although sales fell 7% in Swiss franc terms, sales grew in local currencies by 3%, which was above the industry average, to CHF 2.1 billion. The major contributor was *Gerber* in the US, spurred by innovations in the *Juice*, *Graduates*, and *Tender Harvest* lines and the outstanding success of *Lil' Entrees*, a new line of microwavable convenience trays targeted at the toddler segment. *Gerber's* revenues from this segment increased 5%.

Despite the *Baby Care* business competing against private label entries it achieved a record market share in this segment and the *Gerber Wellness* line of skincare and healthcare products achieved a 7% rise in sales helped by the successful re-launch of its infant skin care line.

CIBA Vision

Sales fell 1% in Swiss franc terms but rose 6% in local currencies to CHF 1.8 billion, driven by the high-volume lens franchise, which outpaced the market. Strong selling brands included *Focus DAILIES*, *NIGHT & DAY*, and *FreshLook* colored lenses, supported by the launch of the *FreshLook Radiance* line in several markets including the US, which launched in December. *Focus DAILIES Toric*, the world's first and only daily disposable lens for astigmatism correction, was launched in Europe and is in the process of being introduced in the US.

The lens-care franchise continued to compete in a shrinking market mainly in the US. Sales declined, but were underpinned by increases in certain countries and the roll-out of *FreshLook Care* in Japan.

The ophthalmic surgical business was lifted by several innovative products including *VisThesia*, a combination viscoelastic gel and anesthetic, which may help shorten cataract surgeries, *Vivarte PRESBYOPIC* phakic refractive lens; and an improved convenient injector system for the *PRL* phakic refractive lens.

Divested Health & Functional Food activities

We divested our Food & Beverage business, including the Ovaltine®, Caotina® and Lacovo® brands, at the end of November 2002 to Associated British Foods for CHF 402 million. 2002 sales from this divested business, up until the divestment, amounted to CHF 325 million (2001: CHF 400 million).

Operating Expenses

The following table sets forth our operating expenses for each of the periods indicated.

	Year ended December 31,		Change in CHF
	2002	2001 ⁽¹⁾	
	(CHF millions)	(CHF millions)	(%)
Sales	32,412	31,643	2
Cost of goods sold	(7,618)	(7,886)	(3)
Marketing and distribution	(10,987)	(10,703)	3
Research and development	(4,339)	(4,189)	4
Administration and general overheads	(1,581)	(1,588)	0
Operating income	7,887	7,277	8

(1) Restated to reflect the reclassification of certain sales incentives and discounts to retailers as sales deductions instead of marketing and distribution expenses.

Cost of goods sold

Cost of goods sold decreased as a percentage of sales from 24.9% in 2001 to 23.5% in 2002. This was mainly due to continued improvements in productivity and a favorable product mix in Pharmaceuticals.

Marketing & distribution

Marketing & distribution expenses as a percentage of sales increased by 0.1% over 2001 to 33.9% of sales as slightly higher investments in the Pharmaceuticals Division field force and promotional activities were offset by reductions in the Consumer Health Division.

Research & development

Research & development expenses as a percentage of sales were 13.4% in 2002, a small increase over the 2001 level of 13.2%.

Administration & general overheads

Cost containment, especially in Pharmaceuticals, and the recording of CHF 267 million of hedging gains, resulted in a negligible increase in administration & general overheads. As a percentage of sales, administration & general overheads fell to 4.9% in 2002 from 5.0% in 2001.

Operating Income

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The following table sets forth selected operating income data for each of the periods indicated.

	2002	2001	Change in CHF
	(CHF millions)	(CHF millions)	(%)
Pharmaceuticals	6,022	5,677	6
Generics	406	281	44
OTC ⁽¹⁾	374	452	(17)
Animal Health	144	138	4
Medical Nutrition (including Nutrition & Santé) ⁽¹⁾	6	87	(93)
Infant & Baby ⁽¹⁾	355	388	(9)
CIBA Vision	183	174	5
Consumer Health ongoing	1,468	1,520	(3)
Divested Health & Functional Food activities	216	(7)	
Consumer Health	1,684	1,513	11
Corporate and other income/expense	181	87	108
Group operating income	7,887	7,277	8

⁽¹⁾ 2001 figures reported the results of OTC, Medical Nutrition (including Health and Functional Foods) and Infant & Baby together under the name Consumer Health. These businesses have now been separated into the OTC, Medical Nutrition (including Nutrition & Santé) and Infant & Baby Business Units.

Our operating income increased by 8% from CHF 7.3 billion in 2001 to CHF 7.9 billion in 2002. Our operating margin was 24.3% of sales, an increase of 1.3 percentage points compared with 2001 (23.0%).

Pharmaceuticals Division

The Pharmaceuticals Division's operating income rose 6% to CHF 6.0 billion in 2002 with the Division's operating margin improving by 0.6 percentage points over the year to 28.7%. As a percentage of sales, the cost of goods sold improved 1.2 percentage points due to product mix changes and productivity gains. Marketing & distribution investments increased slightly as a percentage of sales to drive the launches of *Elidel* and *Zelnorm/Zelmac*.

Implementation of the new research strategy and the establishment of the new Cambridge research facility led to a 4% increase in research & development investments, which remained at 17% of sales.

Included in administration and general overheads were currency hedging gains of CHF 267 million which were offset by CHF 314 million of impairment charges against the goodwill of the Division's biotechnology investments (Genetic Therapy Inc., Systemix Inc., and Imutran Ltd. acquisitions from 1995 and 1996) due to the aforementioned change in research and development strategy, and a CHF 80 million additional impairment charge against the pitavastatin marketing rights acquired in 2001. These impairment charges have been determined based on discounted cash flow models of the expected future sales arising from these activities.

Consumer Health Division

The Division's operating income has increased by 11% over the year from CHF 1.5 billion in 2001 to CHF 1.7 billion in 2002. The Division's ongoing operating income, excluding the impact of the divested Health & Functional Food activities, has fallen by 3% to CHF 1.47 billion. As explained below, increases in the operating income of Generics, Animal Health and CIBA Vision Business Units have been offset by falls in the Division's other Business Units.

Generics

Operating income increased significantly by 44% over 2001, fuelled by top-line growth, productivity gains and a stronger focus on higher margin products. Although regional sales forces were expanded and new markets entered, marketing & distribution expenses were reduced as a percentage of sales.

Research & development investments increased 27% to CHF 215 million due to product developments and the funding of the new Generics R&D center in Vienna.

The positive trend of sales and functional costs, and the non-recurrence of acquisition-related costs last year, lifted the operating margin 3 percentage points to 14.5%. We have not recorded any contribution to operating income from the recently completed Lek acquisition.

OTC

Operating income dropped 17% over the year to CHF 374 million, as a result of lower sales volumes and increased general & administration expenses due primarily to the Divisional reorganization announced in February and exit costs from a Japanese joint venture. These were partially offset by reduced marketing & distribution expenses. The operating margin fell 1.9 percentage points to 15.9%.

Animal Health

2002 operating income increased 4% to CHF 144 million, leading to an operating margin of 14.8% (2001: 14.3%). Apart from acquisition-related charges, operating costs were reduced significantly as marketing & distribution investments were focused on key new launches, while research & development investments were maintained as a percentage of sales.

Medical Nutrition (including Nutrition & Santé)

Operating income fell 93% to CHF 6 million as a result of restructuring provisions of CHF 40 million and a one-time provision for potential additional value-added tax charges in Germany. As a result, the operating margin fell to 0.5% from 7.8% in 2001. Excluding the exceptional items of CHF 66 million operating income would have been CHF 72 million and would have produced an operating margin of 6.5%.

Infant & Baby

2002 operating income fell 9% to CHF 355 million. Operating income was affected by one-off goodwill impairment charges of CHF 39 million primarily related to the Hiborn acquisition in Brazil of 1998. As a result, the operating margin fell to 17.1% from 17.4% in 2001. Excluding this impairment of CHF 39 million, the operating margin would have been 19.0%.

CIBA Vision

Operating income reached CHF 183 million. Investments in marketing & distribution were increased to power new launches and advertising campaigns. Research & development investments slightly increased as the Business Unit focused on the development of new products and lens production technology. Operating margin increased slightly to 10.4% in 2002 compared with 9.7% in 2001.

Divested Health & Functional Food activities

The operating income of CHF 216 million includes the divestment gain of CHF 205 million, after related restructuring charges arising on the divestment of the Food & Beverage business, and the normal operating income from these activities offset by CHF 28 million of goodwill

impairment charges in connection with this divestment.

Corporate and Other Income/Expense

This includes the costs of corporate management, income resulting from charging share and share option plan costs to the operating companies, and pension income. Net corporate income increased from CHF 87 million in 2001 to CHF 181 million in 2002.

Net income

The following table sets forth selected income statement data for the periods indicated.

	2002	2001	Change in CHF
	(CHF millions)	(CHF millions)	(%)
Operating income	7,887	7,277	8
Income from associated companies	(10)	139	
Financial income, net	949	1,067	(11)
Income before taxes and minority interests	8,826	8,483	4
Taxes	(1,490)	(1,440)	3
Income before minority interests	7,336	7,043	4
Minority interests	(23)	(19)	21
Net income	7,313	7,024	4

Income from associated companies

Associated companies are accounted for using the equity method where we own between 20% and 50% of the voting shares of such companies. Income from associated companies is mainly derived from our investments in Roche Holding AG and Chiron Corporation.

We have a 32.7% (2001: 21.3%) interest in Roche voting shares, which represents a 6.2% (2001: 4.0%) interest in the total Roche equity. The income statement effect after taking into account the required charges due to additional depreciation and amortization arising from allocating the purchase price to tangible and intangible assets and goodwill, resulted in a pre-tax loss of CHF 180 million (2001: CHF 39 million loss). See " 5.D Trend Information."

Our 42.0% interest in Chiron contributed pre-tax income of CHF 167 million (2001: CHF 185 million). Our share of the net income of both Roche and Chiron is based upon analysts' estimates for the full year 2002. Any differences between these estimates and actual results will be adjusted in 2003. In 2001, our income statement includes five quarters of results for Chiron, including an estimate of Chiron's fourth quarter results. Up to 2000, income from Chiron was included in our financial statements with a three month lag, with only the four quarters through to September 30 of the year being consolidated.

Financial income, net

A lower but still attractive level of net financial income of CHF 949 million (2001: CHF 1,067 million), was generated in a difficult environment due to good currency management and equity strategies. Gross financial income of CHF 1,144 million (including net income on options and forward contracts and after deducting other financial expense) was CHF 408 million lower than in 2001 because the average level of liquidity has been lower and interest rates were also substantially lower in the current year.

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This was partially offset by lower interest expense of CHF 301 million (2001: CHF 367 million) and by net currency gains of CHF 106 million (up CHF 224 million from last year). The net currency gain was due to currency gains of CHF 380 million, mainly from US dollar and Japanese yen positions, partially offset by losses in emerging markets.

Taxes

Despite increased profits, the tax charge of CHF 1.5 billion increased only CHF 50 million over the year. Taxes as a percentage of income before tax were 16.9% in 2002 compared to 17.0% in 2001.

Net income

Net income as a percentage of total sales increased, from 22.2% in 2001 to 22.6% in 2002. This was due to margin increases in the operating businesses offsetting lower financial income.

2001 Compared to 2000

Overview

The following compares our results in the year ended December 31, 2001 to those of the year ended December 31, 2000. 2001 and 2000 information has been restated to reflect a change in classification of certain sales incentives and discounts to retailers. The restatement amounted to a sales reduction of CHF 395 million in 2001, and CHF 410 million in 2000, with a corresponding reduction in Marketing & Distribution expenses. The following figures have also been restated to separate out the results of the OTC, Infant & Baby, and Medical Nutrition (including Nutrition & Santé and the Food & Beverage business through its divestment in 2002) Business Units. We had previously reported the results of these businesses together under the name Consumer Health. In 2002, our Consumer Health Division was reorganized to include these Business Units, together with our Generics, Animal Health and CIBA Vision Business Units.

In Swiss francs, our sales from continuing activities in 2001 increased by 10% over 2000 to CHF 31.6 billion; our operating income increased by 8% to CHF 7.3 billion; our net income increased by 8% to CHF 7.0 billion; and our free cash flow (excluding acquisitions of subsidiaries, of 21.3% of the voting shares of Roche Holding AG and of marketing and product rights) increased by 25% in Swiss francs to CHF 4.1 billion. 47% of our sales were generated in the NAFTA region (43% in the United States), 32% in Europe and 21% in the rest of the world.

Growth from our continuing activities was driven by an 8% increase in our sales volume. All of our Business Units except for Generics benefited from price increases which in total amounted to 2%. The sales increase due to the acquisition of new products and subsidiaries was 4%. Our sales performance in Swiss francs suffered from a 4% unfavorable currency effect as the Swiss franc rose against the yen by an average of 12% and against the Euro by 3%.

Overall, Pharmaceuticals accounted for 64% of our total sales. Of the remaining businesses, Generics contributed 8% of our total sales, OTC 8%, Animal Health 3%, Medical Nutrition (including Nutrition & Santé) 5%, Infant & Baby 6% and CIBA Vision 6%.

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Our operating margin from continuing activities in 2001 was 23.0% of sales, a decrease of 0.4 percentage points compared with 2000 (23.4%). Although our cost of goods sold (+8%) and research and development expenses (+4%) increased at a lower rate than sales, our marketing and distribution expenses (+17%) increased at a significantly higher rate than did our sales. Overall, our marketing and distribution expenses reached 34% of sales (2000: 32% of sales). This was due to investments associated with sales force enhancements and new product launches, particularly in Pharmaceuticals. Our research and development expenses as a percentage of sales fell in 2001 to 13.2% from 14.0% in 2000, primarily because of the strong growth in our sales.

Sales

The following table sets forth selected sales data for each of the periods indicated.

Year ended December 31,			
2001 ⁽¹⁾	2000 ⁽¹⁾	Change in CHF	Change in local currencies

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Year ended December 31,

	(CHF millions)	(CHF millions)	(%)	(%)
Sales				
Pharmaceuticals	20,181	18,150	11	15
Generics	2,433	1,973	23	26
OTC ⁽²⁾	2,538	2,483	2	5
Animal Health	962	1,083	(11)	(7)
Medical Nutrition (including Nutrition & Santé) ⁽²⁾	1,515	1,513	0	3
Infant & Baby ⁽²⁾	2,227	2,108	6	6
CIBA Vision	1,787	1,392	28	33
Consumer Health	11,462	10,552	9	11
Sales from continuing activities	31,643	28,702	10	14
Sales from discontinued Agribusiness activities ⁽³⁾		6,693		
Group sales	31,643	35,395	(11)	(8)

(1) 2001 and 2000 figures have been restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million in 2001 and CHF 410 million in 2000.

(2) 2001 and 2000 figures reported the results of OTC, Medical Nutrition (including Health and Functional Foods) and Infant & Baby together under the name Consumer Health. These businesses have now been separated into the OTC, Medical Nutrition (including Nutrition & Santé) and Infant & Baby Business Units.

(3) Agribusiness: Crop Protection and Seeds businesses spun-off on November 6, 2000.

Pharmaceuticals Division

Sales increased by 11% in Swiss francs or by 15% in local currencies to CHF 20.2 billion in 2001 from CHF 18.2 billion in 2000. In the United States, where 43% of turnover was generated, sales increased by 24% reaching CHF 8.6 billion. This performance was driven by numerous product launches, particularly in the United States, most notably *Gleevec/Glivec* (chronic myeloid leukemia), which achieved sales of CHF 257 million in less than 8 months. As a result of the *Gleevec/Glivec* launch, oncology product sales expanded by 28% in local currencies. Acquisitions, principally *Famvir* (antivirals), which was acquired late in 2000, contributed 2% to the Division's sales growth. Continued marketing focus on key products such as *Diovan/Co-Diovan* (hypertension), *Lotrel* (hypertension), *Lamisil* (fungal infections) and *Exelon* (Alzheimer's) was also a major factor in the sales growth.

Diovan/Co-Diovan (hypertension) surpassed *Sandimmun/Neoral* (transplantation) as our best-selling product in 2001 with CHF 1.9 billion in sales (+58% in local currencies). *Diovan*, an angiotensin II receptor blocker, took the leadership position in new prescriptions from Cozaar® (the competitor product by Merck) in the United States. *Diovan* is the only drug of its class to have shown a clinical benefit with regard to heart failure.

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Lotrel (hypertension), another key product in the cardiovascular therapeutic area, continued to expand its share of new prescriptions in its sector to 22%, and achieved sales of CHF 813 million, which was an increase of 48% in local currencies. *Lotrel* sales were also the key driver behind the performance of the *Cibacen* group which achieved total sales of CHF 1.5 billion, an increase over last year of 22% in local currencies.

The decline in sales due to generic erosion or new competition continued to be limited for both *Neoral/Sandimmun* (7% in local currencies) and *Voltaren* (8% in local currencies). *Neoral/Sandimmun* achieved sales of CHF 1.8 billion and *Voltaren* of CHF 1.1 billion.

Aredia (bone metastases) expanded beyond last year's sales and reached CHF 1.3 billion, although the first competing generic products entered the market at the beginning of December. Our follow-on product *Zometa* received approval during 2001 both in Europe and in the United States for its first indication, hypercalcemia of malignancy, and received approval during 2002 in the US for bone metastases, its second indication. We expect our combined *Aredia/Zometa* sales to decline slightly in 2002, since *Zometa* is not yet likely to fully compensate for the anticipated decline in *Aredia* sales.

Overall, Pharmaceuticals' top ten products reached total sales of CHF 12.0 billion reflecting an increase of 13% in local currencies. Pharmaceuticals' top twenty products expanded sales by 19% in local currencies to CHF 15.6 billion.

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Top 20 Pharmaceutical Products 2001

Brands	Therapeutic Area	United States	% change in local currencies	Rest of the World	% change in local Currencies	Total	% change	
							In CHF	In local currencies
		(CHF m)		(CHF m)		(CHF m)		
<i>Diovan/Co-Diovan</i>	Hypertension	943	47	937	70	1,880	53	58
<i>Neoral/Sandimmun</i>	Transplantation	525	(20)	1,304	(2)	1,829	(11)	(7)
<i>Cibacen/Lotensin</i>	Hypertension	1,309	28	209	(7)	1,518	21	22
(of which <i>Lotrel</i>)		813	48			813	47	48
<i>Lamisil</i> (group)	Fungal infections	730	22	675	16	1,405	(15)	19
<i>Aredia</i> (group)	Cancer complications	835	17	435	12	1,270	13	15
<i>Voltaren</i>	Inflammation/pain	24	(51)	1,042	(7)	1,066	(15)	(8)
<i>Sandostatin</i> (group)	Acromegaly	343	38	473	20	816	23	26
<i>Lescol</i>	Cholesterol reduction	388	15	426	18	814	12	17
<i>Miacalcic</i>	Osteoporosis	443	(6)	264	10	707	(2)	0
<i>Tegretol</i>	Epilepsy	263	9	420	(4)	683	(3)	1
Top ten products		5,803	17	6,185	10	11,988	9	13
<i>Leponex/Clozaril</i>	Schizophrenia	229	(16)	310	5	539	(8)	(5)
<i>Estraderm</i> (group)	Hormone replacement	221	30	263	(7)	484	5	6
<i>Exelon</i>	Alzheimer's disease	219	158	184	65	403	100	104
<i>Foradil</i>	Asthma	17	NA	373	16	390	18	21
<i>Visudyne</i>	Wet form of age-related macular degeneration	238	114	139	154	377	123	127
<i>Famvir</i> (group)	Antivirals	244	NA	79	NA	323	NA	NA
<i>Nitroderm TTS</i>	Heart disease	3	(55)	317	(3)	320	(11)	(4)
<i>Zaditen</i>	Asthma, allergy			265	(6)	265	(16)	(6)
<i>Gleevec/Glivec</i>	Chronic myeloid Leukemia	176	NA	81	NA	257	NA	NA
<i>Trileptal</i>	Epilepsy	170	129	80	36	250	84	87

						% change	
Top twenty total	7,320	29	8,276	12	15,596	15	19
Rest of portfolio	1,316	4	3,269	4	4,585	(1)	4
Total	8,636	24	11,545	10	20,181	11	15

NA

Not applicable as insignificant or non-existent prior year sales.

Consumer Health Division*Generics*

Sales increased by 23% in Swiss francs or by 26% in local currencies to CHF 2.4 billion from CHF 2.0 billion in 2000. Strategic acquisitions completed in early 2001 in the United States, Argentina, the UK and Germany account for 20 percentage points of this increase. In the United States (32% of sales), sales increased by 39% in local currency (4% excluding acquisitions) as a result of reorganization initiatives, the successful integration of the Apothecon acquisition, and the launch of a generic version of Eli Lilly's Prozac® (fluoxetine). Generics' US affiliate, Geneva Pharmaceuticals, holds 6-month exclusivity rights to commercialize the 10 mg capsule formulation of fluoxetine.

Our Generics Pharmaceuticals Business (for finished pharmaceutical products) achieved a sales increase of 39% in Swiss Francs due to acquisitions, product launches and the global roll-out of the generic version of the combination of amoxicillin and clavulanic acid.

Our Industrial Business (active pharmaceutical ingredients and biotech substances) grew by 6% in Swiss francs as a result of focused efforts in high quality intermediates and the expansion of the biotechnology business.

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OTC

Sales increased from CHF 2.48 billion in 2000 to CHF 2.54 billion in 2001. The increase of 5% in local currencies (2% in Swiss francs) was driven by the key brands *Nicotinell /Habitrol®* (smoking cessation)*Voltaren Emulgel* (topical pain relief) and *Lamisil* Cream (antifungal).

Animal Health

Sales fell by 11% in Swiss francs, or 7% in local currencies, to CHF 962 million in 2001 from CHF 1.1 billion in 2000, as the companion animal market in the U.S suffered from inventory reductions at the veterinary clinic level and competitive pressures in the flea product market continued. The farm animal business saw a flat performance as the impact of the foot-and-mouth disease crisis in Europe was felt. The acquired vaccine and aquaculture businesses grew sales, but these businesses are at present too small to offset these events.

Medical Nutrition (including Nutrition & Santé)

Sales recorded an increase of 3% in local currencies, but stayed constant in Swiss francs at CHF 1.5 billion in 2000 and 2001. The Home Care market drove sales growth, together with a strong performance in Europe, and a strong second half in the United States, offset by a decline in the juice business in Poland.

Infant & Baby

Sales increased 6% in both local currencies and Swiss francs from CHF 2.1 billion in 2000 to CHF 2.2 billion in 2001. *Gerber* reached a new record market share with 75.9% in the US baby/toddler food segment, while *Gerber* Care and *Gerber* Wellness products continued to make progress in a competitive marketplace.

CIBA Vision

Sales increased by 28% in Swiss francs, or 33% in local currencies, to CHF 1.8 billion in 2001 from CHF 1.4 billion in 2000. Excluding the impact of the Wesley Jessen acquisition, sales increased by 5% in local currencies. The innovative *Focus* range of lenses, led by *FocusDailies* and *Focus Night & Day*, and the acquired *FreshLook* brand of cosmetic lenses, were drivers of sales growth. *Focus Night & Day* also became the first high-oxygen extended wear contact lens for up to 30 nights of continuous wear to receive US FDA approval. Innovative product launches including *Aosept Plus/Aosept Clear Care* and *SOLO-care Plus*, as well as upcoming specialty lens product developments, are aimed at addressing the overall declining lens care and specialty lens markets.

Discontinued Agribusiness Division

Agribusiness was only included in our Group figures up to its spin-off on November 6, 2000.

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Operating Expenses

The following table sets forth our operating expenses for each of the periods indicated.

	Discontinued activities	Continuing activities	Group
	(CHF millions)	(CHF millions)	(CHF millions)
2001⁽¹⁾			
Cost of goods sold		(7,886)	(7,886)
Marketing and distribution		(10,703)	(10,703)
Research and development		(4,189)	(4,189)
Administration and general overheads		(1,588)	(1,588)
2000⁽¹⁾			
Cost of goods sold	(2,926)	(7,316)	(10,242)
Marketing and distribution	(1,389)	(9,146)	(10,535)
Research and development	(646)	(4,011)	(4,657)
Administration and general overheads	(576)	(1,502)	(2,078)

⁽¹⁾ 2001 and 2000 figures have been restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million in 2001 and CHF 410 million in 2000.

The following table sets forth our continuing operating expenses for each of the periods indicated.

	Year ended December 31,		
	2001⁽¹⁾	2000⁽¹⁾	Change in CHF
	(CHF millions)	(CHF millions)	(%)
Sales from continuing activities	31,643	28,702	10
Cost of goods sold	(7,886)	(7,316)	8
Marketing and distribution	(10,703)	(9,146)	17
Research and development	(4,189)	(4,011)	4
	(1,588)	(1,502)	6

	Year ended December 31,		
Administration and general overheads			
Operating income from continuing activities	7,277	6,727	8

(1) 2001 and 2000 figures have been restated to reflect a change in classification of certain sales incentives and discounts to retailers. Sales and marketing & distribution expenses have both been reduced by CHF 395 million in 2001 and CHF 410 million in 2000.

Cost of goods sold

Our cost of goods sold for continuing activities decreased as a percentage of our sales from 25.5% in 2000 to 24.9% in 2001. This was mainly due to continued improvements in productivity and product mix in Pharmaceuticals.

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Marketing and distribution

Our marketing and distribution expenses for continuing activities as a percentage of our sales increased from 31.9% in 2000 to 33.8% in 2001 as significant investments were made in the Pharmaceuticals field force and in promotional activities to support key products.

Research and development

Our research and development expenses for continuing activities as a percentage of our sales were 13.2% in 2001 compared to 14.0% in 2000. This is primarily the result of strong growth in Pharmaceuticals' sales.

Administration and general overheads

The costs of implementing state-of-the-art information technology systems in Pharmaceuticals and other Business Units led to an increase in our administration and general overheads by 5.7%. As a percentage of sales from continuing activities, however, there was a fall in administration and general overheads to 5.0% in 2001 from 5.2% in 2000.

Operating Income

The following table sets forth selected operating income data for each of the periods indicated.

	2001	2000	Change in CHF
	(CHF millions)	(CHF millions)	(%)
Pharmaceuticals	5,677	5,401	5
Generics	281	242	16
OTC ⁽¹⁾	452	424	7
Animal Health	138	179	(23)
Medical Nutrition (including Nutrition & Santé) ⁽¹⁾	80	74	8
Infant & Baby ⁽¹⁾	388	371	5
CIBA Vision	174	100	74
Consumer Health	1,513	1,390	9

	2001	2000	Change in CHF
Corporate and other income/expense	87	(64)	
Operating income from continuing activities	7,277	6,727	8
Operating income from discontinued Agribusiness activities ⁽²⁾		1,156	
Group operating income	7,277	7,883	(8)

(1) 2001 and 2000 figures reported the results of OTC, Medical Nutrition (including Health and Functional Foods) and Infant & Baby together under the name Consumer Health. These businesses have now been separated into the OTC, Medical Nutrition (including Nutrition & Santé) and Infant & Baby Business Units.

(2) Agribusiness: Crop Protection and Seeds businesses.

Our operating margin on continuing activities was 23.0% of our sales, a decrease of 0.4 percentage points compared with 2000 (23.4%).

Pharmaceuticals Division

Operating income increased 5% to CHF 5.7 billion in 2001 from CHF 5.4 billion in 2000. Operating margin fell by 1.7 percentage points to 28.1% in 2001, due to a 24% increase in marketing and distribution expenses, which now represent almost 36% of sales, compared to 32% in 2000 as field force and promotion activities were increased due to new product launches. The operating income also includes a charge of CHF 216 million for impairment of pitavastatin marketing rights which were written down from their initial value of CHF 722 million. Research and development expenses fell slightly as a percentage of Division sales, to 17% of sales compared to 18% in 2000, even though the actual amount increased by 4% in Swiss franc terms. Additional productivity improvements also were achieved reducing the cost of goods sold as a percentage of sales.

Consumer Health Division

Generics

The Business Unit had an operating income of CHF 281 million in 2001, an increase of 16% compared with CHF 242 million in 2000. The operating margin declined from 12.3% in 2000 to 11.5% in 2001 due to several factors. These included integration costs associated with completing several acquisitions during the year; increased price pressure, especially in the United States; costs related to legal actions in the United States; and stepped-up investment in marketing.

OTC

Operating income increased by 7% from CHF 424 million in 2000 to CHF 452 million in 2001, driven by the key brands *Nicotinell/Habitrol* (smoking cessation), *Voltaren Emulgel* (topical pain relief) and *Lamisil* Cream (antifungal). The operating margin increased 0.8% from 17% in 2000 to 17.8% in 2001.

Animal Health

Operating income fell by 23% from CHF 179 million in 2000 to CHF 138 million principally due to the significantly reduced level of sales, particularly in the companion animal business. The Business Unit's operating margin also declined from 16.5% in 2000 to 14.3% in 2001, principally due to a decline in US sales in the higher-margin companion animal business.

Medical Nutrition (including Nutrition & Santé)

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Operating income increased by 8% from CHF 74 million in 2000 to CHF 80 million in 2001. Operating margin increased by 0.4% from 4.9% in 2000 to 5.3% in 2001.

Infant & Baby

Operating income increased by 5% from CHF 371 million in 2000 to CHF 388 million in 2001 due to increased market share in the US Baby/Toddler food segment. Operating margin decreased slightly from 17.6% in 2000 to 17.4% in 2001.

CIBA Vision

Operating income increased by 74% from CHF 100 million in 2000 to CHF 174 million in 2001 and operating margin increased from 7.2% in 2000 to 9.7% in 2001. The 2001 operating income includes the impact of the Wesley Jessen business on revenue and costs for the full twelve months of 2001 compared to only three months in 2000. On a comparable basis, excluding exceptional integration costs related to the acquisition of Wesley Jessen of CHF 34 million (2000: CHF 110 million), operating income decreased slightly by 1% from CHF 210 million in 2000 to CHF 208 million in 2001, and the operating margin declined from 15.1% in 2000 to 11.6% in 2001, principally due to goodwill charges.

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Corporate and Other Income/Expense

Corporate and other income/expense include the costs of corporate and country management, offset by employee benefit, share and share option plan charges levied on the operating companies and credited to corporate other income. In 2001, Corporate and other income/expense achieved a net income of CHF 87 million, compared with a net expense of CHF 64 million in 2000, principally due to higher share and share option charges to Division companies.

Net income

The following table sets forth selected income statement data for the periods indicated.

	Discontinued activities	Continuing activities	Group
	(CHF millions)	(CHF millions)	(CHF millions)
2001			
Operating income		7,277	7,277
Income from associated companies		139	139
Financial income, net		1,067	1,067
Taxes		(1,440)	(1,440)
Minority interests		(19)	(19)
		7,024	7,024
Net income		7,024	7,024
2000			
Operating income	1,156	6,727	7,883
Income from associated companies	1	97	98
Financial income, net	(125)	1,216	1,091
Taxes	(316)	(1,504)	(1,820)
Minority interests	(17)	(25)	(42)
	699	6,511	7,210
Net income	699	6,511	7,210

Net Income from continuing activities

The following table sets forth selected income statement data from continuing activities for the periods indicated.

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	2001	2000	Change in CHF
	(CHF millions)	(CHF millions)	(%)
Operating income from continuing activities	7,277	6,727	8
Income from associated companies	139	97	43
Financial income, net	1,067	1,216	(12)
Income before taxes and minority interests	8,483	8,040	6
Taxes	(1,440)	(1,504)	(4)
Income before minority interests	7,043	6,536	8
Minority interests	(19)	(25)	(24)
Net income from continuing activities	7,024	6,511	8

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Income from associated companies

We account for income from our associated companies using the equity method where we own between 20% and 50% of the voting shares of such companies. In 2001, income from associated companies was mainly derived from our stakes in Roche Holding AG (Roche) and in Chiron Corporation (Chiron).

Our ownership of 21.3% of Roche voting shares, which represents a 4% interest in the total Roche voting and non-voting equity instruments, was acquired in the first half of 2001. The income statement effect after taking into account the required charges due to additional depreciation and amortization arising from allocating the purchase price to tangible and intangible assets and goodwill, resulted in a pre-tax loss of CHF 39 million. Our ownership of 41.9% of Chiron shares resulted in pre-tax income of CHF 185 million (2000: CHF 97 million).

Our share of the net income of both Roche and Chiron is based upon analysts' estimates of their net income for the full year 2001. Any differences between these estimates and actual results will be recorded in 2002. In 2001, our income statement includes five quarters of results for Chiron, including an estimate of Chiron's fourth quarter results. Up to 2000, income from Chiron was included in our financial statements with a three month lag, with only the four quarters through to September 30 of the year being consolidated.

Financial income/expense, net

We realized financial income, net from continuing activities of CHF 1.1 billion in 2001 despite difficult market conditions. This result was achieved through successful management of liquid funds and a gain from the sale of US dollar denominated bonds. Our 2001 financial income was CHF 149 million lower than the CHF 1.2 billion achieved in 2000. The 2000 figure excludes CHF 125 million of interest expense which was allocated to the discontinued Agribusiness activity, because it related to the debt which was transferred to Syngenta on its spin-off.

Interest income from our investments fell from CHF 1.0 billion in 2000 to CHF 639 million in 2001 due to lower interest rates and less liquidity. Interest expense fell slightly from CHF 385 million in 2000 (excluding CHF 125 million allocated to Agribusiness) to CHF 367 million in 2001.

Increased capital gains realized from our sale of US dollar bonds and from other sources contributed an additional CHF 359 million to our financial results. The net result from our financial derivative transactions (mainly options and forward contracts) improved by CHF 405 million, largely as a result of our management of liquid funds. We do not write uncovered options, so a large part of our net derivative expense is compensated by gains on the underlying assets.

The financial impact from the different currencies held by our affiliates changed from a gain of CHF 329 million in 2000 to a loss of CHF 118 million in 2001. This change was largely the result of major currency losses during 2001 from the currency devaluations in Turkey and Brazil.

Taxes

Our 2001 tax charge on continuing activities was 4% less in 2001 than in 2000. Our 2001 tax charge totaled CHF 1.4 billion as compared to the 2000 tax charge on continuing activities of CHF 1.5 billion (excluding CHF 316 million allocated to the discontinued Agribusiness activities). Taxes on our continuing activities as a percentage of income before tax were reduced to 17.0% compared with 18.7% in 2000. This is due to a change in the geographic mix of taxable income.

Net income

Net income from our continuing activities as a percentage of our total sales decreased slightly from 22.7% in 2000 to 22.2% in 2001. This decrease was principally due to profit margin declines in some of our businesses and to lower financial income.

Exchange Rate Exposure and Risk Management

We transact business in many currencies other than the Swiss franc. On average in 2002, the Swiss franc was stronger against the US dollar, Japanese yen, Euro and British pound than in 2001. The total negative currency effect on sales growth was 9% and the total negative impact on operating income growth was 2%.

On average in 2001, the Swiss franc was stronger against the Japanese yen, Euro and British pound, yet remained almost at the same level against the US dollar as in 2000. The total negative currency effect on sales growth in 2001 as against 2000 was 4% and the total negative impact on operating income growth was 1%.

As a result of our foreign currency exposure, exchange rate fluctuations have a significant impact in the form of both translation risk and transaction risk on our income statement. Translation risk is the risk that our consolidated financial statements for a particular period or as of a certain date may be affected by changes in the prevailing rates of the various currencies of the reporting subsidiaries against the Swiss franc. Transaction risk is the risk that the value of transactions executed in currencies other than the subsidiary's currency may vary according to currency fluctuations.

In 2002, 43% of our sales were generated in US dollars, 25% in Euro, 5% in Swiss francs, 8% in Japanese yen and 19% in other currencies. In 2001, 45% of our sales were generated in US dollars, 23% in Euro, 5% in Swiss francs, 8% in Japanese yen and 19% in other currencies. In 2000, 44% of sales were generated in US dollars, 24% in Euro, 6% in Swiss francs, 8% in Japanese yen and 18% in other currencies.

In 2002, 32% of our operating costs were generated in US dollars, 25% in Euro, 21% in Swiss francs, 6% in Japanese yen, and 16% in other currencies. In 2001, 31% of our operating costs were generated in US dollars, 22% in Euro, 26% in Swiss francs, 5% in Japanese yen, and 16% in other currencies. In 2000, 33% of operating costs were generated in US dollars, 23% in Euro, 26% in Swiss francs, 5% in Japanese yen, and 13% in other currencies.

New Accounting Pronouncements

See note 31(1)(xii) and (xiii) to the consolidated financial statements for a discussion of the effect of new accounting standards.

US Dollar Reporting

We intend to change the reporting currency of our consolidated financial statements from Swiss francs to US dollars beginning on January 1, 2003. The 2002 consolidated financial information will be restated into US dollars with this restatement being available prior to the release of the first quarter 2003 financial data.

The move to presenting the consolidated financial data in US dollars reflects the increasing importance of our sales in US dollars and will make the financial information more easily comparable with peer companies in the pharmaceutical industry.

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The following table sets forth certain information about our cash flow and net liquidity for each of the periods indicated.

	Year ended December 31,		
	2002	2001 ⁽¹⁾	2000 ⁽¹⁾
	(CHF millions)		
Cash flow from continuing operating activities	8,162	7,342	6,175
Cash flow used for continuing investing activities	(4,455)	(4,675)	(50)
Cash flow used for financing activities	(6,617)	(354)	(4,755)
Net cash flow from discontinued operating and investing Agribusiness activities			1,271
Net effect of currency translation on cash and cash equivalents	(99)	31	(119)
Change in cash and cash equivalents	(3,009)	2,344	2,522
Change in short- and long-term marketable securities	(1,538)	(940)	(4,375)
Change in short- and long-term financial debts	858	(2,524)	3,770
Change in net liquidity	(3,689)	(1,120)	1,917
Net liquidity at January 1	13,475	14,595	12,678
Net liquidity at December 31	9,786	13,475	14,595

(1)

Restated due to reclassification of the fair value of derivative financial instruments from other current assets to marketable securities & financial derivatives and from other short term liabilities to short term financial debts.

Cash Flow From Continuing Operating Activities

Our primary source of liquidity is cash generated from our operations. The cash flow from operating activities increased by CHF 0.8 billion (11%) to CHF 8.2 billion mainly as result of higher net income and increased non-cash expenses. Depreciation, amortization and impairment charges increased by CHF 0.3 billion to CHF 2.1 billion. Current tax payments were CHF 181 million lower than prior year despite an increase of the total tax charge of CHF 50 million.

In 2001, cash flow from continuing operations increased to CHF 7.3 billion in 2001 from CHF 6.2 billion in 2000. CHF 637 million of the increase is attributed to reduced funding of working capital.

Our free cash flow, excluding the impact of the acquisitions of the Roche stake, Lek and marketing and product rights, increased 25% from CHF 3.3 billion in 2000 to CHF 4.1 billion in 2001, and 9.6% from CHF 4.1 billion in 2001 to CHF 4.5 billion in 2002.

Our capital expenditure on tangible fixed assets for the 2002 financial year totaled CHF 1.7 billion (5.1% of sales), compared to a comparable figure CHF 1.4 billion (4.3% of sales) in 2001 and CHF 1.4 billion in 2000 (4.0% of sales).

This level of capital expenditure reflects the continuing investment in production and research and development facilities. We intend to maintain spending at 2002 levels in 2003 and to fund these expenditures with internally generated resources.

Free cash flow of the Divisions and Business Units uses the same definition as that for our Group, however no dividends, tax or financial receipts or payments are included in the Division and Business Unit calculation.

The following table details the components of these increases.

	2002	2001	2000
	(CHF millions)		
Cash flow from continuing operating activities	8,162	7,342	6,175
Purchase of tangible fixed assets	(1,661)	(1,351)	(1,179)
Purchase of intangibles and financial assets	(4,137)	(7,552)	(3,088)
Sale of tangible, intangible and financial assets	1,525	1,825	749
Dividends paid to third parties	(2,294)	(2,194)	(2,064)
Acquisition of product and marketing rights		826	2,661
Acquisition of 11.4% (in 2002) and 21.3% (in 2001) of the voting shares of Roche Holding AG	2,868	5,177	
Free cash flow from continuing activities	4,463	4,073	3,254
(excluding Roche stake, product and marketing rights acquisitions)			

Cash Flow From Continuing Investing Activities

Our cash outflow due to investing activities was CHF 4.5 billion, only marginally below last year. CHF 4.2 billion was spent to increase the strategic investment in Roche and for the acquisition of Lek. The net investment in tangible assets accounted for CHF 1.7 billion. The net proceeds from sale of marketable securities was CHF 0.7 billion.

Our net cash outflow from investing activities increased to CHF 4.7 billion in 2001 from CHF 50 million in 2000. The more than CHF 4.6 billion increase in 2001 over 2000 was primarily due to the CHF 5.2 billion we spent to acquire our strategic interest in Roche Holding AG.

Cash Flow From Financing Activities

The cash flow used for financing activities was CHF 6.6 billion. CHF 5.1 billion was spent for the acquisition of treasury shares and CHF 2.3 billion for dividend payments while the issue of a EUR 1 billion bond and the conversions of the remaining two convertible bonds contributed to a net inflow of CHF 0.8 billion.

Our net cash outflow from financing activities decreased to CHF 354 million in 2001 from CHF 4.8 billion in 2000. The CHF 4.4 billion decrease in 2001 as compared to 2000 was due mainly to proceeds we received from the issuance of equity option instruments and from a non-convertible bond issue.

In 2002, we received CHF 0.8 billion by increasing our financial debts as compared to receipts of CHF 1.6 billion in 2001, and payment of CHF 1.5 billion in 2000 from reducing our financial debts.

Net Liquidity

Our overall liquidity (cash, cash equivalents and marketable securities including financial derivatives) amounted to CHF 17.6 billion at December 31, 2002, a reduction of CHF 4.6 billion over the previous year-end balance. Net liquidity (liquidity less financial debt) remains high at CHF 9.8 billion despite a reduction of CHF 3.7 billion from the December 31, 2001 level due to the various financing activities explained above.

Our overall net liquidity was CHF 13.5 billion as of December 31, 2001. This was a decrease of CHF 1.1 billion from our overall net liquidity of CHF 14.6 billion as at December 31, 2000.

We use marketable securities and derivative financial instruments to manage the volatility of our exposures to market risk in interest rates and liquid investments. Our objective is to reduce, where appropriate, fluctuations in earnings and cash flows. We manage these risks by selling existing assets or transactions. We therefore expect that any loss in value for those securities or derivative financial instruments generally would be offset by increases in the value of those hedged transactions.

Until December 31, 2002 we used the Swiss franc as our reporting currency. From January 1, 2003 we use the US dollar as our reporting currency. We are exposed to foreign exchange movements in other currencies. We enter into various contracts, which are impacted by currency

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movements. We manage the risk associated with currency movements by entering into various contracts to preserve the value of assets, commitments and anticipated transactions. In particular, we enter into forward contracts and foreign currency option contracts in order to hedge certain anticipated foreign currency revenues and our net investments in certain foreign subsidiaries. See "Item 11. Quantitative and Qualitative Disclosures About Market Risk," for additional information.

Contractual Obligations

We have long-term research agreements with various institutions which require us to fund various research projects in the future. As of December 31, 2002, the aggregate total amount of payments which may be required under these agreements was CHF 594 million. We expect to fund these long-term research agreements with internally generated resources.

As of December 31, 2002, our total financial debt was CHF 7.8 billion, as compared with CHF 8.7 billion as of December 31, 2001, and CHF 6.1 billion as of December 31, 2000. The decrease of CHF 0.9 billion of debt at December 31, 2002 compared to December 31, 2001 is primarily due to the conversion of CHF 1.2 billion of convertible debt and reduction in short-term debt partially offset by the issue of a EUR 1.0 billion straight bond due 2007.

The increase of CHF 2.6 billion of debt at December 31, 2001 compared to December 31, 2000 was primarily due to the issue of CHF 1.3 billion of straight debt. Our year-end debt/equity ratio fell slightly to 0.20:1 in 2002 from 0.21:1 in 2001 and 0.17:1 in 2000.

We had CHF 3.6 billion in non-convertible bonds at December 31, 2002, up from CHF 2.3 billion at December 31, 2001 and CHF 961 million as of December 31, 2000. The increase from 2001 to 2002 is primarily due to the issuance on November 14, 2002 by our Bermuda affiliate, Novartis Securities Investment Ltd, of EUR 1 billion of 3.75% guaranteed notes, due 2007, guaranteed by Novartis AG. The increase from 2000 to 2001 was primarily due to the issuance on October 17, 2001 by our Bermuda affiliate, Novartis Securities Investment Ltd, of EUR 900 million of 4% guaranteed notes, due 2006, guaranteed by Novartis AG.

For details on the maturity profile of debt, currency and interest rate structure, see note 18 to the consolidated financial statements.

As of December 31, 2002, we had short-term debt (excluding the current portion of long-term debt) of CHF 3.8 billion as compared with CHF 4.9 billion as of December 31, 2001, and CHF 3.9 billion as of December 31, 2000. This short-term debt consisted mainly of CHF 1.3 billion (2001: CHF 1.0 billion; 2000: CHF 408 million) in commercial paper; and other bank and financial debt, including interest-bearing employee accounts, of CHF 2.0 billion (2001: CHF 2.8 billion; 2000: CHF 3.1 billion).

We are in compliance with all covenants or other requirements set forth in our financing agreements. We do not have any rating downgrade triggers that would accelerate maturity of our debt. For details of the maturity profile of debt, currency and interest rate structure, see note 18 to the consolidated financial statements. Our debt continues to be rated by Standard & Poor's and Moody's respectively as AAA and Aaa for long-term maturities and A1+ and P1 for short-term debt. We consider our working capital to be sufficient for our present requirements.

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The following summarizes our contractual obligations and other commercial commitments, and the effect such obligations and commitments are expected to have on our liquidity and cash flow in future periods.

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	2 3 years	4 5 years	After 5 years
	(CHF millions)				
Long-Term Debt	3,784	29	836	2,874	45
Operating Leases	1,313	259	355	207	492
Finance Leases	203	127	76		
Research & Development Commitments (excluding potential milestone payments) ⁽¹⁾	594	279	245	68	2

	Payments Due by Period				
	0-12 Months	13-24 Months	25-36 Months	37-48 Months	More than 48 Months
Total Contractual Cash Obligations	5,894	694	1,512	3,149	539

(1) The possible impact of potential milestone payments are explained in the following section, "Contingencies".

Contingencies

In connection with our original investment in Chiron, we agreed to:

purchase up to \$500 million of new Chiron equity, at Chiron's request (a "Put"). To date, Chiron has made no such request.

guarantee up to \$703 million of Chiron debt. We are not obligated to make any payments under this guarantee unless Chiron defaults on the debt. If Chiron uses this guarantee in excess of \$403 million, then our Put obligation is reduced by the excess amount.

The outstanding equity put and guarantee expire no later than 2011.

We have entered into long-term research agreements with various institutions. These agreements may require us to make up to CHF 347 million in potential milestone and other contingent payments. Of this amount, we may be required to pay up to CHF 269 million within the next 5 years.

For other contingencies, see "Item 4 Information on the Company 4.D Property, Plants and Equipment Environmental Matters" and "Item 8 Financial Information 8.A Consolidated Statements and Other Financial Information 8.A.7 Legal Proceedings."

Share repurchase program

On July 22, 2002, we initiated our third share buy-back program to repurchase shares on the SWX Swiss Exchange for up to a total of CHF 4 billion. During 2002, 24.6 million shares were repurchased via a second trading line on the SWX for a total amount of CHF 1.5 billion. As with our past share buy-back programs, our Board will propose reducing the Group's share capital by 22.7 million shares, corresponding to the shares repurchased but not yet cancelled, at the forthcoming Annual General Meeting to be held on March 4, 2003.

During 2002, an additional 55.4 million shares, net were also repurchased on the first trading line for a total of CHF 3.6 billion.

In February 2001, our Board of Directors approved a second share repurchase program for an amount of up to CHF 4 billion by means of a second trading line established on the SWX Swiss Exchange. As of December 31, 2001, we had repurchased 59 million shares for a total of CHF 3.9 billion. An additional 1.9 million shares were then purchased during January 2002 to complete this program. The

average price for the shares we acquired under this program was CHF 66. On March 21, 2002 the Annual General Meeting cancelled 61.1 million shares with a nominal value of CHF 31 million.

On August 27, 1999, we announced our intention to repurchase shares in the open market for an amount of up to CHF 4 billion. That repurchase program was completed in January 2001. The program was wholly financed with our surplus liquidity. The acquired shares are kept as treasury shares.

At December 31, 2002, our holding of treasury shares (excluding the amount that we will propose to be cancelled at the March 2003 Annual General Meeting and treasury shares reserved for call options) amounted to 272 million shares or 9.6% of the total number of issued shares.

Other equity instruments

During December 2001, through indirectly held affiliates, we sold a total of 55 million ten-year Low Exercise Price Options ("LEPOs") on our shares in two tranches, with an exercise price of CHF 0.01, for EUR 2.2 billion in proceeds (EUR 40 per LEPO). The LEPOs will be settled using Novartis treasury shares. We have accounted for the LEPOs in our balance sheet as an increase in share premium at fair value less related issuance costs. Exercises will be recorded as a share issuance with no gains (losses) recorded in our consolidated statements of income.

We also sold a total of 55 million ten-year Put options (the "Put options") on our shares in two tranches with an exercise price of EUR 51 for EUR 616 million in proceeds (EUR 11.22 per Put option). The Put options can be exercised at the third, fourth, fifth, sixth, seventh, and tenth anniversary of the date of sale and can, at our option, either be physically settled, or net-share settled, using our treasury shares. We hold the right to accelerate the exercise date and expiration date for any outstanding options at any time on or after December 6, 2006 at the accreted exercise price of the Put options. We have accounted for the option premium associated with the Put options as an increase in share premium less related issuance costs. Exercises will be recorded as treasury share transactions with no gains (losses) recorded in our consolidated statements of income.

The contractual terms of the Put options place a limit on the number of shares to be delivered in a net share settlement. We cannot under any circumstances be forced into a net cash settlement by the counterparty. If we choose to physically settle the Put options, however, this could result in a cash payment to the counterparty. The total possible cash payment measured at the earliest possible exercise date for the two tranches of Put options (2004 and 2005) would amount to EUR 3.1 billion increasing to EUR 3.8 billion at the expiry dates (2010 and 2011) of the two tranches.

Convertible Bonds

A 2% Convertible Bond was issued on October 6, 1995 by our affiliate, Sandoz Capital BVI Ltd. (now Novartis Capital Ltd., "Novartis Capital"). This Bond was guaranteed by Sandoz AG and due in 2002 in the amount of \$750 million. The bonds were convertible into Novartis shares up to and including September 30, 2002. As of December 31, 2001, bonds with an aggregate principal amount of \$717.4 million were outstanding, entitling their holders to a maximum of 27,560,117 of our shares (taking into account the forty-for-one share split). In 2002, except for Bonds with a value of US\$120,000, all of these Bonds were converted into 27,555,462 Novartis shares. The remaining US\$120,000 in Bonds were repaid.

A 1¹/₄% Convertible Bond was issued on October 23, 1995 by Novartis Capital. This Bond was guaranteed by Sandoz AG and due in 2002 in the amount of CHF 750 million. As of December 31, 2001, bonds with an aggregate principal amount of CHF 19.2 million were outstanding, entitling their holders to a maximum of 766,200 of our shares (taking into account the forty-for-one share split) and 19,155 shares of Syngenta AG. In 2002, all of these Bonds were converted into 766,200 Novartis shares and 19,155 shares of Syngenta AG.

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Straight Bond

On November 14, 2002, our affiliate, Novartis Securities Investment Ltd, Bermuda, issued a 3.75% bond, guaranteed by Novartis AG and due in 2007, in the amount of EUR 1 billion.

On October 17, 2001, our affiliate, Novartis Securities Investment Ltd., Bermuda, issued a 4% bond, guaranteed by Novartis AG and due in 2006, in the amount of EUR 900 million.

ADS Direct Purchase Plan and Dividend Reinvestment Plan

The Direct Purchase and Dividend Reinvestment Plan for our ADSs, which are listed on the New York Stock Exchange, is a no-fee plan open to new investors as well as existing ADS shareholders in the US. This plan features no enrollment, purchase or dividend reinvestment fees. An initial investment of \$500 is required, or the deposit of a minimum of 10 Novartis ADSs into a plan account. Transaction fees are applied when ADSs are sold. To date, there have been no new issuances of Novartis shares or ADSs under this plan and no effect on our share capital or balance sheet.

5.C Research and Development, Patents and Licenses

Our research and development spending totaled CHF 4.3 billion, CHF 4.2 billion and CHF 4.0 billion for the years 2002, 2001 and 2000, respectively. The amounts for 2000 have been restated to exclude research and development spending by the discontinued Agribusiness Division. Each of our Divisions and Business Units has its own research and development and patents policies. For a description of those

research and development and patents policies, see "Item 4. Information on the Company 4.B Business Overview."

5.D Trend Information

As of December 31, 2002, we owned 32.7% of the voting shares of Roche Holdings AG. We accounted for this investment using the equity method, which in turn depends on various estimates of Roche's financial results. See "Item 5. Operating and Financial Review and Prospects 5.A Operating Results Critical Accounting Policies." On February 10, 2003, Roche announced the sale of its Vitamins and Fine Chemicals Business, and related asset impairment charges of CHF 1.65 billion and incremental legal provisions of CHF 0.6 billion. Our preliminary estimate of our pre-tax share of these charges and provisions is approximately CHF 140 million. In accordance with the Group's policy, the impact of this charge as well as other changes to our estimate of Roche's 2002 results of operations will be reflected in the Group's 2003 first quarter results.

Please see " 5.A Operating Results" for additional trend information.

Item 6. Directors, Senior Management and Employees

6.A Directors and Senior Management

We are fully committed to good corporate governance. Our principles and rules on corporate governance are laid down in our Articles of Incorporation, the Regulations of the Board and the Charters of the Board Committees. The Board's Corporate Governance Committee reviews these principles and rules regularly in the light of prevailing best practices and forwards suggestions for improvement to the full Board approval.

In 2002, our shareholders' rights were reinforced by three changes to the Articles of Incorporation: Reduction of the deadline for submitting agenda items prior to a General Meeting from 60 to 45 days, introduction of the option of conducting electronic voting during the General Meeting, and reduction in the Directors' terms of office from four to three years.

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Our Board of Directors is elected by our shareholders and holds the ultimate decision-making authority for Novartis AG, except for those matters reserved by law or by our Articles of Incorporation to the shareholders. The Board is comprised of 12 persons. An additional two directors will be proposed for election at the Annual General Meeting of Shareholders on March 4, 2003. They are Srikant Datar, Professor of Accounting and Senior Associate Dean of the Harvard Business School, and Wendelin Wiedeking, Chief Executive Officer of Dr. Ing. h.c. F. Porsche AG. The average age of our Directors is 62 and their average tenure is 5 years. Our Chairman and Chief Executive Officer, Daniel Vasella, is our only executive Director. Messrs. Lippuner and Jetzer were members of the Executive Committee until 1996 and 1999, respectively. The primary functions of the Board, as defined in the Swiss Code of Obligations and in our Articles of Incorporation, are:

strategic direction and management;

accounting matters, financial control and financial planning;

appointing and dismissing of members of the Executive Committee and other key executives;

overall supervision of business operations; and

setting out the motions to be presented to the General Meeting, including approval of financial statements.

The agenda for Board meetings is set by the Chairman and Chief Executive Officer. Any member of the Board (the "Directors") may request in writing that an item be included on the agenda.

The Directors receive materials in advance of Board meetings allowing them to prepare for the handling of the items on the agenda.

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The Board recognizes the importance of being fully informed on material matters involving the Group and our business. Therefore, the Directors are required to hold discussions with our management, to review materials provided to them, to visit offices and plants and to participate in no less than a majority of the meetings of the Board and its Committees.

The Chairman and Chief Executive Officer recommends members of senior management who at the invitation of the Board, attend Board meetings to report on areas of the business within their responsibility, thereby ensuring that the Board has sufficient information to make appropriate decisions.

The Board reviews the performance of the Chairman and Chief Executive Officer once a year. The Board also meets in Executive Session from time to time to consider other matters of importance to our business.

Daniel Vasella has been elected by the Board as our Chairman and also to serve Novartis AG as Chief Executive Officer. The Board has appointed Prof. Helmut Sihler as Vice Chairman and Lead Director. Hans-Jörg Rudloff has been elected Vice Chairman.

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During 2002, the Board met 7 times. Detailed information on each Director's attendance at full Board and Board Committee meetings is provided in the table below:

	Full Board	Chairman's Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance Committee
Number of meetings in 2002	7	9	3	4	2
Daniel Vasella, MD	7 ⁽¹⁾	9 ⁽¹⁾			
Prof. Helmut Sihler, JD, PhD	6	8	3 ⁽¹⁾	4 ⁽¹⁾	2
Hans-Jörg Rudloff	6	8	3		1
Dr. h.c. Birgit Breuel	7			4	
Prof. Peter Burckhardt, MD	7				
H.-U. Doerig, PhD ⁽²⁾	1			1	
Walter G. Frehner	7			4	
William W. George	7	9	3		2 ⁽¹⁾
Alexandre F. Jetzer	7				
Pierre Landolt	7				
Prof. Ulrich Lehner, PhD ⁽³⁾	5			3 ⁽⁴⁾	
Heini Lippuner	7	9			
Prof. Rolf M. Zinkernagel, MD	7				2

(1) Chair.

(2) Until March 21, 2002.

(3) Since March 21, 2002.

(4) Since August 20, 2002.

Directors

Dr. h.c. Daniel Vasella, MD (Age 49). Chairman of the Board of Directors and Chairman of the Chairman's Committee (since 1999), Chief Executive Officer and Head of the Group Executive Committee (since 1996). His current term as Chairman expires in 2004. Daniel Vasella graduated with an MD in medicine from the University of Berne in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the USA in 1988. From 1993 to 1995, Daniel Vasella advanced from Head of Corporate Marketing and Senior Vice President and Head of Worldwide Development to Chief Operating Officer of Sandoz Pharma Ltd. In 1995 and 1996, Daniel Vasella was a member of the Sandoz Group Executive Committee and the Chief Executive Officer of Sandoz Pharma Ltd. Daniel Vasella is also a member of the Board of Directors of Pepsico, Inc., United States, the Board of Directors of Credit Suisse Group, Switzerland

and the Supervisory Board of Siemens AG, Germany. In addition, he is a member of the International Board of Governors of the Peres Center for Peace in Israel and a member of several industry associations and educational institutions, including the International Business Leaders Advisory Council for the Mayor of Shanghai, where he serves as Chairman. In 2002, Daniel Vasella was awarded an honorary doctorate by the University of Basel.

Prof. Helmut Sihler, JD, PhD (Age 72). Vice Chairman of our Board (since 1996), Lead Director and a member of the Chairman's Committee and Compensation Committee (since 1999), and Chairman of the Audit and Compliance Committee and a member of the Corporate Governance Committee (since 2001). His current term expires in 2004. Helmut Sihler studied philology and law in Graz, Austria and Burlington, Vermont (USA) and graduated with a doctorate in philology and a JD. In 1957, he joined Henkel KGaA, Germany, initially holding several positions in the marketing department for consumer goods. From 1980 to 1992, Helmut Sihler was Chairman of the Central Board of Management of Henkel KGaA. In the years 1988 and 1989, Helmut Sihler was President of the Association of the German Chemical Industry. In 1983, Helmut Sihler was elected to the Board of Ciba-Geigy AG. Helmut Sihler was ad interim CEO of Deutsche Telekom AG, Germany, from July to November 2002 and he is Chairman of the Supervisory Board of Porsche AG, Germany.

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Hans-Jörg Rudloff (Age 62). Vice Chairman of our Board of Directors (since 1996), a member of the Chairman's Committee and Compensation Committee (since 1999), and a member of the Corporate Governance Committee (since 2001). His current term expires in 2004. Hans-Jörg Rudloff studied economics at the Universities of Bern and Grenoble and graduated in 1965. He joined Credit Suisse in Geneva, Switzerland, and moved to New York in 1968 to join the investment banking firm of Kidder Peabody International. He was in charge of the Swiss operation and was elected Chairman and a member of the Board of Kidder Peabody International in 1978. In 1980 he joined Credit Suisse First Boston and was elected Vice-Chairman in 1983 and Chairman and CEO in 1989. From 1986 to 1990 Hans-Jörg Rudloff was also a member of the Executive Board of Credit Suisse in Zurich, Switzerland, in charge of all securities and capital market departments. In 1990 he became a member of the Executive Board of CS First Boston and a member of the CS Holding Board. From 1994 to 1998, Hans-Jörg Rudloff was Chairman of MC-BBL in Luxembourg and joined Barclays Capital in 1998 where he is presently Chairman of the Executive Committee. In 1994, Hans-Jörg Rudloff was elected to the Board of Directors of Sandoz AG and served as its Vice-Chairman from 1995 to 1996. Hans-Jörg Rudloff also serves on a number of boards of other companies, including the Boards of Directors of the TBG Group (Thyssen-Bornemisza Group), Monaco, Marcuard S.A., Geneva, and RBC, Russia, the Advisory Board of Landeskreditbank, Baden-Württemberg, Germany, and the Beirat of EnBW (Energie Baden- Württemberg), Germany. He is also on the Advisory Board of the MBA program of the University of Bern, Switzerland.

Dr. h.c. Birgit Breuel (Age 65). Director (since 1996), and a member of the Audit and Compliance Committee (since 1999). Her current term expires in 2005. Birgit Breuel studied politics at the Universities of Hamburg, Oxford and Geneva. She was Minister of Economy and Transport (1978-86) and Minister of Finance (1986-90) of the Land Niedersachsen (Lower Saxony), the second largest state of Germany. In 1990, Birgit Breuel was elected to the Executive Board of the Treuhandanstalt, which was responsible for the privatization of the former East Germany's economy; in 1991, she also became the President of the Treuhandanstalt. From 1995 to 2000, she acted as the General Commissioner and CEO of the world exhibition EXPO 2000 in Hannover, Germany. In 1994, Birgit Breuel was elected to the Board of Directors of Ciba-Geigy AG. Birgit Breuel is also a member of the Supervisory Board of Gruner+Jahr AG, Hamburg, Germany.

Prof. Peter Burckhardt, MD (Age 64). Director (since 1996). His current term expires in 2005. After studying in Basel and Hamburg, Germany, Peter Burckhardt graduated with an MD from the University of Basel in 1965. He trained from 1966 to 1978 in internal medicine and endocrinology, mainly at the University Hospital of Lausanne, Switzerland, and the Massachusetts General Hospital, Boston, USA, and was nominated Chief of Clinical Endocrinology in 1978, and full Professor of Internal Medicine and Chairman of the Department of Internal Medicine at the University Hospital of Lausanne in 1982. Since 1992, he has been the Head of the Medical Service at the same University. Since 1982 Peter Burckhardt has been the Chairman of the Novartis- (formerly Sandoz-) Foundation for Biomedical Research in Switzerland. Next to his activities as a clinician and academic teacher, Peter Burckhardt is conducting clinical research, mainly in bone diseases and calcium metabolism. He has authored more than 300 scientific publications and is an editorial board member of several international scientific journals. He is Chairman of National Societies at the International Foundation of Osteoporosis, and is a former president of the Swiss Internist's Society and member of the Appeal Committee of the Swiss Office for Drug Control. Peter Burckhardt is a board member of numerous scientific societies including the Swiss Societies of Nutrition, Clinical Chemistry, Endocrinology, Bone and Mineral Research, the Committee for Endocrinology of the European Community, and since 1990, the organization of the International Symposia on Nutrition and Osteoporosis.

Walter G. Frehner (Age 69). Director (since 1996), and a member of the Audit and Compliance Committee (since 2001). His current term expires in 2004. After completing commercial school and an apprenticeship at the Bernese Cantonal Bank in Interlaken, Switzerland, Walter Frehner broadened his experience both in Switzerland and abroad. In 1958 he joined Swiss Bank Corporation (now UBS) where he held a number of increasingly senior positions. He was appointed General Manager and member of the

Executive Board in 1978, President of the Executive Board (CEO) in 1987 and Chairman of the Board of Directors in 1993 from which position he retired in 1996. Walter Frehner has been a member of the Board of Directors of Ciba-Geigy AG since 1994. He is also a member of the Board of Directors of Schindler Holding AG, Ebikon, Switzerland, and of Bâloise Holding AG, Basel, Switzerland, where he is also the Vice Chairman.

William W. George (Age 60). Director (since May 1999), and a member of the Chairman's Committee and Chairman of the Corporate Governance Committee (since 2001). His current term expires in 2003. William W. George received his BSIE from Georgia Institute of Technology in 1964 and his MBA from Harvard University in 1996. From 1966 to 1969, he worked in the US Department of Defense as special assistant to the Secretary of the Navy and as assistant to the Comptroller. After having served as President of Litton Microwave Cooking Products, William W. George held a series of executive positions with Honeywell from 1978 to 1989. Thereafter he served as President and Chief Operating Officer of Medtronic, Inc. in Minneapolis, USA, and, from 1991 to 2001, as its Chief Executive Officer. From 1996 to 2002, he was Medtronic's Chairman. William W. George is a member of the Boards of Directors of Goldman Sachs and Target Corporation (formerly Dayton Hudson). He is also a Visiting Professor of Management at Ecole Polytechnic Fédérale Lausanne and at the International Institute of Management Development. In addition, he is a member of the Board of Directors of Harvard Business School, American Red Cross, Carnegie Endowment for International Peace and Minneapolis Institute of Arts.

Alexandre F. Jetzer (Age 61). Director (since 1996). His current term expires in 2005. Alexandre Jetzer studied law and economics at the University of Neuchâtel, Switzerland and is a licensed attorney. After more than ten years as General Secretary of the Swiss Federation of Commerce and Industry (Vorort), Alexandre Jetzer joined Sandoz in 1980. In 1981 he became Member of its Group Executive Committee in capacity of Chief Financial Officer (CFO) and, as of 1990, as Head of Management Resources and International Coordination. From 1995 to 1996, he was Vice Chairman and Chief Executive Officer of Sandoz Pharmaceuticals Corporation in East Hanover, New Jersey, USA. From the time of the Novartis merger in 1996 until 1999, he was a member of the Novartis Executive Committee and Head of International Coordination, Legal & Taxes. He is also a member of the Board of Directors of Clariden Bank, Zurich, Switzerland.

Pierre Landolt (Age 55). Director (since 1996). His current term expires in 2005. Pierre Landolt graduated with a Bachelor of Law degree from the University of Sorbonne in Paris. From 1974 to 1976, he worked for Sandoz Brazil. In 1977, he acquired an agricultural estate in Brazil, cultivating organic tropical fruit as well as producing dairy products. In 1989, he founded a firm for irrigation systems. In the same year, he became the main associate and director of a bank in São Paulo. Since 1997 Pierre Landolt has been Associate and Chairman of Axial Par Ltda, São Paulo, a company investing in sustainability. In 2000, he was co-founder of Eco Carbone LLC, Delaware, USA, a company focused on the development of carbon sequestration processes in Europe, Africa and South America. In 1986, Pierre Landolt was elected as a member of the Board of Directors of Sandoz AG. Pierre Landolt is the President of the Sandoz family foundation, Glaris, Switzerland, and the Chairman of the Board of Directors of Emasan AG, Basel, Switzerland. He is also a member of the Board of Directors of Syngenta AG, and of the Syngenta Foundation for Sustainable Agriculture, both in Basel, Switzerland. In addition, he serves as chairman of the Board of Directors of Curacao International Trust Company, Curacao, Netherlands Antilles, and as vice-chairman of the Boards of Directors of Sandoz FF Holding Bancaire et Financière S.A., Pully, Switzerland, Parmigiani, Mesure et Art du Temps S.A., Fleurier, Switzerland, and the Fondation du Montreux Jazz Festival, Montreux, Switzerland.

Prof. Ulrich Lehner, PhD (Age 56). Director and member of the Audit and Compliance Committee (since 2002). His current term expires in 2005. Ulrich Lehner studied business administration and mechanical engineering in Darmstadt, Germany. After completing his studies in 1972, he was a teaching and research assistant at the Institute for Business Administration at the Darmstadt Technical University. He earned a doctorate in economics in 1975. From 1975 to 1981, Ulrich Lehner was an auditor with Deutsche Treuhand-Gesellschaft AG in Düsseldorf, Germany. In 1981, he joined Henkel KGaA as Head of Domestic Affairs in the Central Accounting/Tax Department. After heading the Controlling

Department of Fried. Krupp GmbH in Essen, Germany, from 1983 to 1986, he returned to Henkel as Finance Director. From 1991 to 1993, Ulrich Lehner headed the then-formed Management Holding, Henkel Asia-Pacific Ltd., in Hong Kong. From 1994 to 1995, he served Henkel KGaA, as Corporate Vice President of the Finance and Controlling Department, and, from 1995 to 2000, as Executive Vice President, Finance/Logistics. He was appointed Deputy President in 1999 and President and CEO of Henkel KGaA in 2000. Ulrich Lehner also serves as a member of the Board of Directors of Dresdner Bank, Luxembourg, Luxembourg, and of Ecolab Inc., St. Paul, USA. In addition, he is a member of the Advisory Board of Dr. August Oetker KG, Bielefeld, Germany, and of Krombacher Brauerei, Krombach, Germany. He is an Honorary Professor at the University of Münster, Germany.

Heini Lippuner (Age 69). Director (since 1996) and member of the Chairman's Committee (since 1999). His current term expires in 2005. After completing his commercial studies in St. Gallen, Switzerland, Heini Lippuner began his career with Geigy Ltd in the Dyestuffs Division. Following a number of foreign assignments, he headed the Dyestuffs and Chemicals Division in Germany from 1968 to 1972. He served as a member of the world-wide Dyestuffs and Chemicals Division's management committee of Ciba-Geigy Ltd from 1973 to 1982, and became the Head of this Division in 1982. In 1986, Heini Lippuner became a member of the Executive Committee of the Ciba-Geigy Group and took over as its Chairman and Chief Operating Officer in 1988. Heini Lippuner is also a member of the Board of Directors of Bühler AG, Uzwil, Switzerland, and of Asset Link AG, Reinach BL, Switzerland. In addition he is the Chairman of the Foundation Board of the International Institute for Management Development (IMD) in Lausanne, Switzerland, and serves on the advisory boards of Credit Suisse Group, Zurich, Switzerland.

Prof. Rolf M. Zinkernagel, MD (Age 58). Director (since 1999) and member of the Corporate Governance Committee (since 2001). His current term expires in 2003. Rolf Zinkernagel graduated from the University of Basel with an MD in 1970. Since 1992 he has been Professor and Director of the Institute of Experimental Immunology at the University of Zurich, Switzerland. Rolf Zinkernagel has received many awards and prizes for his work and contribution to science, the most prestigious being the Nobel Prize for Medicine which he was awarded in 1996. He is a member of the Swiss Society of Allergy and Immunology, the American Associations of Immunologists and of Pathologists, the ENI European Network of Immunological Institutions, and the International Society for Antiviral Research and a member of the Executive Board of the International Union of Immunological Societies (IUIS). Rolf Zinkernagel is a member of the Boards of Directors of Cytos Biotechnology AG, Schlieren/Zurich, Switzerland. He is also a member of the Scientific Advisory Boards of: The Lombard Odier Darier Hentsch & Cie Bank, Geneva, Switzerland; BT & T, Jersey; Bio-Alliance Capital, Frankfurt, Germany; Aravis General Partner Ltd., Cayman Islands; Cytos Biotechnology AG, Schlieren/Zurich, Switzerland; Biozell, Milano, Italy; Esbatech, Zurich, Switzerland; Novimmune, Geneva, Switzerland; and MannKind, Sylmar CA, USA. Rolf Zinkernagel is also a Science Consultant to: GenPat 77, Berlin/Munich, Germany; Aponetics AG, Witterswil, Switzerland; Solis Therapeutics, Palo Alto, USA and Ganymed, Mainz, Germany.

Executive Officers and Senior Management

Dr. h.c. Daniel Vasella, MD (Age 49). Chairman of the Board of Directors and Chairman of the Chairman's Committee (since 1999), Chief Executive Officer and Head of the Group Executive Committee (since 1996). See "Directors."

Urs Bärlocher, JD (Age 60). Head of Legal and General Affairs and a member of the Group Executive Committee (since 1999). Urs Bärlocher earned his JD at the University of Basel and was admitted to the bar in 1970. After having worked as a tax lawyer, he joined Sandoz in 1973, and held a number of key positions including Head of Strategic Planning and Head of Group Reporting. In 1987, he was made a member of the Sandoz Executive Board responsible, among other things, for Strategic Planning, HR, Legal, Taxes, Patents and Trademarks. In 1990, he became CEO of the Sandoz Nutrition Division and then, in 1993, CEO of Sandoz Pharma. In 1995, Urs Bärlocher assumed the position of Chairman of the

Board of Sandoz Deutschland GmbH (Germany) and Biochemie GmbH (Austria). After the formation of Novartis in 1996, he served as Head of International Coordination, Legal, Tax, Insurance, before his responsibilities were widened to include in addition, among other things, Corporate Intellectual Property, Corporate Health, Safety & Environment, Corporate Affairs and Corporate Security.

Raymund Breu, PhD (Age 57). Chief Financial Officer and a member of the Group Executive Committee (since 1996). Raymund Breu graduated from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland, with a PhD in mathematics. In 1975, he joined the Treasury Department of the Sandoz Group, and, in 1982, became the Head of Finance for the Sandoz affiliates in the UK. In 1985, he was appointed Chief Financial Officer of Sandoz Corporation in New York, where he was responsible for all Sandoz Finance activities in the US. In 1990, he became Group Treasurer of Sandoz Ltd., Basel, Switzerland, and, in 1993, Head of Group Finance and Member of the Sandoz Executive Board. Raymund Breu is also a member of the Board of Directors of Chiron Corporation (in which we hold an equity position), and of the SWX Swiss Exchange and of its admission panel and its takeover commission.

Paul Choffat, JD (Age 53). Head of Novartis Consumer Health and member of the Group Executive Committee (since 2002). Paul Choffat holds a JD from the University of Lausanne, Switzerland, and an MBA from the International Institute for Management Development in Lausanne. He started his professional career with Nestlé in Zurich, Switzerland, and London, UK. From 1981 to 1985, he was a project manager at McKinsey & Company in Zurich. Between 1987 and 1994, he held a number of leading positions at Landis & Gyr in Zug, Switzerland, where he became a member of the Executive Board and Head of the Communications Division. In 1994, he moved to Von Roll in Gerlafingen, Switzerland, as CEO. Paul Choffat joined Sandoz in 1995 as Head of Management Resources and International Coordination. He subsequently became a member of the Executive Board and was responsible for Group Planning and Organization. During the Novartis merger he headed the integration office. In 1996, he returned to line management as CEO of Fotolabo SA, Montpreveyres-sur-Lausanne, Switzerland, where he remained for three years before becoming an entrepreneur and private investor in 1999.

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Thomas Ebeling (Age 44). Head of Novartis Pharma (since 2000) and member of the Group Executive Committee (since 1998). Thomas Ebeling graduated from the University of Hamburg with a degree in psychology. From 1987 to 1991, he held several positions of increasing responsibility at Reemstma, Germany. In 1991, he joined Pepsi-Cola Germany as Marketing Director. He became Marketing Director for Germany and Austria in 1993 and was National Sales and Franchise Director for Pepsi's retail and on-premise sales from 1994. He then served as General Manager of Pepsi-Cola Germany. In 1997, Thomas Ebeling joined Novartis as General Manager of Novartis Nutrition for Germany and Austria. After having served as CEO of Novartis' global nutrition operations, he became Head of Novartis Nutrition worldwide, then Head of Novartis Consumer Health worldwide, and then Chief Operating Officer of Novartis Pharmaceuticals, before attaining his present position.

Prof. Mark C. Fishman, MD (Age 52). Head of Pharmaceuticals Research and a member of the Group Executive Committee (since 2002). Mark Fishman is a graduate of Yale College and Harvard Medical School. He completed his internal Medicine Residency, Chief Residency, and Cardiology training at the Massachusetts General Hospital. He serves on several editorial boards and has worked with national policy and scientific committees including those of the NIH and Wellcome Trust. He has been honored with many awards and distinguished lectureships and is a Fellow of the American Academy of Arts and Sciences. Before joining Novartis, Mark Fishman was Professor of Medicine at Harvard Medical School and Chief of Cardiology and Director of the Cardiovascular Research Center at the Massachusetts General Hospital.

Norman C. Walker (Age 50). Head of Human Resources (since 1998) and a member of the Group Executive Committee (since 1999). Norman Walker earned a degree in Business Studies at the University of Brighton, UK, in 1975 and attended the Harvard International Senior Management Program in 1994. He started his professional career with Ford Motor Company in London in 1975. Over a period of 9 years he held a number of posts in human resources (HR) management before he joined GrandMet in London in 1984 where he assumed HR positions in various of their business units. Norman Walker subsequently

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joined Kraft Foods in 1991 and held a number of leading HR positions in Germany, the United States and Switzerland. More specifically, he headed HR activities for commercial and manufacturing operations in 26 countries and maintained a dynamic HR effort there during a period of significant change, as the company acquired, merged and refocused its business portfolio.

Gilbert Wenzel (Age 46). Resigned as Head of Strategic Planning and a member of the Group Executive Committee during 2002, a position he had held since 2000.

Business Unit⁽¹⁾ Heads

Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
David Epstein American, 41	Oncology (since 2000)	1989	Chief Operating Officer and member of the Executive Committee of Novartis Pharmaceuticals Corporation (US)	Bachelor of Science, Pharmacy (Rutgers University) and MBA (Columbia University)
Anthony Rosenberg British, 49	Transplantation and Immunology (since 2001)	1980	Various leading positions with Sandoz UK and Novartis Group	Bachelor of Science (University of Leicester) and Master of Science (University of London)
Flemming Ørnskov Danish, 45	Ophthalmics (since 2003)	2001	Vice President and Head of Cardiovascular Metabolic Business Franchise at Novartis Pharmaceuticals Corporation (US)	Doctor of Medicine (University of Copenhagen, Denmark), MBA (INSEAD) and Master of Public Health (Harvard University)
Peter Hewes British, 55	Mature Products (since 2000)	1976	Regional European Head of Novartis Pharma; Country Head of Sandoz Portugal	Bachelor of Arts, Economics (University of Reading, UK)
Christian Seiwald Austrian, 47	Generics (since 2001)	1982	Country Head of Novartis Austria; Head of Novartis Austria Pharma Operations	MBA (Innsbruck University, Austria)
Michel Orsinger Swiss, 45	OTC (since 2002)	1993	Senior Vice-President Europe, Middle East and Africa for Novartis' Nutrition and OTC Business Unit; General Manager Sandoz Nutrition Unit	MBA (St. Gallen, Switzerland)

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Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
Switzerland				
Kurt T. Schmidt American, 45	Animal Health (since 2002)	2002	General Manager Food for Kraft Foods Germany; Marketing Director Wrigley Company for German-speaking Europe, Eastern Europe and the Middle East	Bachelor of Science (United States Naval Academy, Annapolis) and MBA (University of Chicago)
Frank Palantoni American, 45	Infant & Baby (since 2002)	1998	President and CEO of Gerber US Marketing; management positions with Procter & Gamble, Nabisco and Groupe Danone	Bachelor of Science (Tufts University) and MBA (Columbia University)
Michel Gardet French, 45	Medical Nutrition (since 2002)	1991	General Manager of Novartis Consumer Health Iberia; Head of Health and Functional Nutrition Novartis	MA (Ecole Supérieure de Commerce de Paris)
Joseph T. Mallof American, 51	CIBA Vision (since 2002)	2002	Regional President of S.C. Johnson & Son for the Americas Asia Pacific; General Manager of Procter & Gamble in Japan and the Philippines	Bachelor of Science (Purdue University) and MBA (University of Chicago)

(1)

In 2002, the following Executives retired from or terminated their employment with the Novartis Group: Gilbert Wenzel (Executive Committee Member), Glen Bradley (Business Unit Head), Hans-Beat Guertler (Business Unit Head) and Luzi von Bidder (Business Unit Head).

None of the above directors or senior management have any family relationship with any other director or member of our senior management. Executive officers are elected by the Board of the affiliate which employs them, typically for an indefinite term of office. They may be removed by the Board at any time. None of the above directors or senior management were appointed pursuant to an arrangement or understanding between such officer or director and any third party.

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6.B Compensation

Non-Executive Directors Compensation

The Compensation Committee of our Board of Directors advises the Board on the compensation of our non-executive Directors. Non-executive Directors receive an annual retainer in an amount that varies with the Board and Committee responsibilities of the Director. Directors are eligible to participate in certain of the equity programs which we offer to senior management and selected employees. Directors receive no additional fees for attending meetings or acting as committee chairs. Directors can choose to receive the annual retainer in cash, shares or share options or a combination thereof. In addition, subject to the business performance of the Group, the Directors may receive a share grant. In 2002, 3,000 shares were granted to each Director in acknowledgement of 2001 business performance. Directors are reimbursed for travel and other necessary business expenses incurred in the performance of their services.

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2002 Non-Executive Directors' Compensation

	Annual Cash Compensation (CHF)	Shares (number)	Share Options (number)
Daniel Vasella, MD Chairman and CEO	(please refer to the table on page 118)		

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	Annual Cash Compensation (CHF)	Shares (number)	Share Options (number)
Chairman's Committee (Chair)			
Prof. Helmut Sihler, JD, PhD Vice Chairman, Lead Director Chairman's Committee (Member) Compensation Committee (Chair) Audit and Compliance Committee (Chair) Corporate Governance Committee (Member)	230,179	7,544	17,276
Hans-Jörg Rudloff Vice Chairman Chairman's Committee (Member) Compensation Committee (Member) Corporate Governance Committee (Member)	24,686	3,000	24,570
Dr. h.c. Birgit Breuel Audit and Compliance Committee (Member)	219,940	3,000	
Prof. Peter Burckhardt, MD	95,656	4,212	
Hans-Ulrich Doerig, PhD⁽¹⁾ Audit and Compliance Committee (Member)	11,832	3,000	
Walter G. Frehner Audit and Compliance Committee (Member)	78,546	3,000	10,750
William W. George Chairman's Committee (Member) Corporate Compensation Committee (Member) Corporate Governance Committee (Chair)	87,500	3,000	23,035
Alexandre F. Jetzer	12,312	3,000	9,214
Pierre Landolt	55,550	3,000	6,911
Prof. Ulrich Lehner, PhD⁽²⁾ Audit and Compliance Committee (Member)	391,371		
Heini Lippuner Chairman's Committee (Member)	18,310	3,000	18,428
Prof. Rolf M. Zinkernagel, MD⁽³⁾ Corporate Governance Committee (Member)	267,832 ⁽³⁾	3,000	15,357
Total	1,493,714	38,756	125,541

(1)

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Hans-Ulrich Doerig, PhD, who is Vice Chairman of the Executive Board and Group Chief Risk Officer of Credit Suisse Group, stepped down from the Board of Novartis AG at the 2002 Annual General Meeting in line with our commitment to good corporate governance principles and to avoid any question of possible conflicts of interest. (Daniel Vasella, MD, is a Member of the Board of Directors of Credit Suisse Group.)

(2) Prof. Ulrich Lehner, PhD, CEO of Henkel AG, was elected as a new Board Member at the 2002 Annual General Meeting.

(3) Includes CHF 250,000 for acting as the Board's delegate in the scientific advisory boards of the Genomics Institute of the Novartis Research Foundation (GNF) and the Novartis Institute for Tropical Diseases (NITD).

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Ownership of Novartis Shares and Share Options by the Non-Executive Directors

The total number of Novartis shares owned as of December 31, 2002 by the non-executive Directors and persons closely linked to them was 252,016. The phrase "persons closely linked to them" means (i) their spouse, (ii) their children below age 18, (iii) any legal entities that they own or otherwise control, or (iv) any legal or natural person who is acting as their fiduciary. No non-executive Director owned 1% or more of our outstanding shares.

As of December 31, 2002, the individual ownership of Novartis shares and options by the non-executive Directors (including persons closely linked to them) was as follows:

Beneficial Owner	Number of shares owned directly or indirectly
Daniel Vasella, MD (please refer to the table on page 119)	
Prof. Helmut Sihler, JD, PhD	34,304
Hans-Jörg Rudloff	86,080
Dr. h.c. Birgit Breuel	4,160
Prof. Peter Burckhardt, MD	16,732
Walter G. Frehner	13,220
William W. George	19,720
Alexandre F. Jetzer	46,120
Pierre Landolt ⁽¹⁾	100
Prof. Ulrich Lehner, PhD	120
Heini Lippuner	26,060
Prof. Rolf M. Zinkernagel, MD	5,400
Total	252,016

(1) Mr. Landolt is also the Chairman of the Board of Directors of Emasan AG. See "Item 7. Major Shareholders and Related Party Transactions 7.A Major Shareholders."

As of the same date, the non-executive Directors held a total of 331,901 Novartis share options. The number of share options, and exercise price have been adjusted to reflect the share split of 1:40 in 2001. Broken down by grant year the number of options held are:

Grant Year	Options held (number)	Exercise Price (CHF)	Term life (years)
2002	125,541	62.0	9
2001	90,480	70.0	9
2000	78,680	51.3	9
1999	17,200	68.4	9

Grant Year	Options held (number)	Exercise Price (CHF)	Term life (years)
1998	20,000	42.8	9

Compensation for former Directors and Executives

In 2002, a total amount of CHF 180,000 was paid to three former members of the Board and CHF 2,186,507 to two former members of senior management, who were not employed by us during 2002.

Report of the Compensation Committee***Executive Compensation Policy***

Our compensation programs are designed to attract, retain and motivate the high caliber of executives, managers and associates who are critical to the success of the corporation. Globalization of labor markets for specialists and executives has led to a rapid convergence between US and European principles of compensation and a stronger focus on long-term, equity based forms of programs.

Overall, the intention of our programs is to provide compensation opportunities that

are comparable to those provided by a selected group of industry specific competitors;

support a performance oriented culture that allows high performers to achieve superior rewards; and

align executive, management and associates to create sustainable shareholder value.

Total individual compensation at target performance level is aimed at the median of comparable companies of our industries. Annual cash and equity incentive awards are based on both overall Group or affiliate company and individual performance. Long-term incentive awards include share options and other forms of equity participation.

Executive compensation programs strongly encourage significant levels of share ownership and put a high portion of total compensation at risk, subject to individual and company performance and the appreciation of Novartis shareholder value.

The Compensation Committee believes that the existing compensation programs have achieved the desired effects.

Compensation Programs Descriptions***Total Compensation***

The total compensation package for each executive consists of the three basic components discussed in more detail below. Target salary and bonus levels are set at the median of the peer group, based on available public data and the analysis of external compensation advisors. Actual compensation levels of individuals may in some instances surpass the median of the market, reflecting superior results. The Compensation Committee believes that this position is consistent with the performance of the Group and its evaluation of the external market.

Salaries

The 2002 salaries of the Swiss-based Executive Committee members are shown in the "Salary" column of the Summary Table -2002 Compensation.

Annual Incentive Awards

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Under the terms of the Novartis Annual Incentive Plan, awards are made each year based on the achievement of predetermined Group and individual performance objectives. Below a threshold level of performance, no awards may be granted under the plan.

Long-Term Incentive Compensation

Long-term incentive compensation, in the form of share options, performance-contingent shares, and restricted shares, comprises a major portion of the total compensation package for executives. In any given year, an executive may be offered share options, performance-contingent shares, and/or restricted shares. Long-term incentives are targeted at the median of the competitive market, with above-average and superior performance resulting in long-term compensation above the targeted amounts. Below a

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threshold level of performance, no awards may be granted under the Plan. Share options are also granted to selected employees.

Share Options

(a)

Novartis Share Option Plan

Under the Novartis Share Option Plan, Directors, executives and other selected employees of Group companies (collectively, the "Participants") may be granted options to purchase Novartis shares. These options are granted both in recognition of past performance and as an incentive for future contributions by the Participants. They allow the Participants to benefit as the price of the shares increases over time, and so provide a long-term incentive for improvements in our profitability and success. If a Participant voluntarily leaves Novartis, options not yet vested will generally be forfeited. The options under the Novartis Share Option Plan have an exercise period of seven years, which begins after the lapse of a two-year vesting period.

(b)

Novartis US ADS Incentive Plan for US-based employees

Introduced in 2001, the Novartis US ADS Incentive Plan grants options to US-based Directors, officers and other selected employees replacing a Share Appreciation Right Plan. Its terms and conditions are substantially equivalent to the Novartis Share Option Plan.

Share Plans

We offer to certain Directors and executives a Long-Term Performance Plan, a Leveraged Share Savings Plan and a Restricted Share Plan. These plans are designed to foster long-term commitment of eligible employees by aligning their incentives to our performance.

(a)

Long-Term Performance Plan

Under the Long-Term Performance Plan, participants are awarded the right to earn Novartis shares. Actual payouts, if any, are determined with the help of a formula which measures, among other things, our performance using economic value added relative to pre-determined strategic plan targets over a three-year period. Additional functional objectives may be considered in the evaluation of performance. If performance is below the threshold level of the pre-determined targets, then no shares will be earned. To the extent the Group's performance exceeds the threshold performance level, an increasing amount of Novartis shares, up to the maximum cap, will be earned.

(b)

Leveraged Share Savings Plan

There are two separate Leveraged Share Savings Plans:

Participants can choose to receive part or all of their Annual Incentive Award in shares. Shares awarded under this Plan are blocked for five years after the grant date. After expiration of the blocking period, the respective shares are matched with an equal number of shares.

In 2001 the Board approved a new employee share ownership plan under which Swiss based employees receive part of their income up to a specified amount in Novartis shares. After the expiration of a blocking period of three years the award is matched with half a share for each

share held.

(c)

Restricted Share Plan

Under the Restricted Share Plan employees may be granted restricted share awards either as a result of a general grant or as a result of an award based on having met certain performance criteria. Shares granted under this Plan generally have a five-year vesting period. Restricted shares carry a high risk of ownership for Swiss based employees as the tax liability in Switzerland is based on the initial price of the share instead of a later, potentially lower price at vesting date.

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Employee Benefits

Employee benefits offered to executives are designed to be competitive and to provide a "safety-net" of protection against the financial catastrophes that can result from disability or death, and to provide a reasonable level of retirement income based on years of service with Novartis.

Evaluation of the Executive Committee Members' Performance

The Compensation Committee meets without the Chairman and CEO to evaluate his performance, and with the Chairman and CEO to evaluate the performance of other Swiss-based Executive Committee members. The bonuses and long-term incentives for 2001 and the base salaries for 2002 were discussed and approved at the meetings of the Compensation Committee held in January and February 2002.

The decisions on compensation of Swiss-based Executive Committee members were mainly based on individual performance evaluations taking into account current market conditions. In 2002, the Compensation Committee considered management's achievement of short and long-term goals, including revenue growth, economic value creation (operating and net income, earnings per share and economic value added) and ongoing efforts to optimize organizational effectiveness and productivity. The Compensation Committee also takes into consideration management's responses to the changes in the global marketplace and the strategic position of the Group. The performance measures were weighted subjectively by each member of the Compensation Committee.

The Compensation Committee of the Board of Directors:

Prof. Helmut Sihler, JD, PhD (Chairman)
Hans-Jörg Rudloff
William W. George

Executive Compensation

In 2002, there were a total of 20 Executive Committee members and Business Unit Heads ("Executives"), including those who retired or terminated their employment in 2002. In total, the Executives received CHF 13,293,000 in salaries and CHF 5,063,000 in cash bonuses. The number of share options granted were 2,255,723 and the number of shares granted 317,736. An additional CHF 2,896,000 was set aside for their pension, retirement and similar benefits. Compensation represents all payments made in 2002; however, cash bonuses and long-term compensation are based on 2001 business performance. The following summary compensation table provides details on the 2002 compensation of the Swiss-based Executive Committee members.

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Summary Table 2002 Compensation

Annual Compensation

Long-Term Compensation

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Name and Principal Position	Annual Compensation		Long-Term Compensation			All Other Compensation (CHF) ⁽⁴⁾	Total (CHF) ⁽⁵⁾
	Salary (CHF)	Cash Bonus (CHF)	Restricted Share Awards (number) ⁽¹⁾	Unrestricted Share Awards (number) ⁽²⁾	Share Options (number) ⁽³⁾		
Daniel Vasella, MD Chairman & CEO	2,916,667		121,164	71,753	921,376	156,000	20,158,777
Urs Bärlocher, JD Head, Legal & General Affairs	660,000		13,328	6,625	101,352	156,000	2,437,088
Raymund Breu, PhD Chief Financial Officer	900,000		18,175	8,973	276,413	156,000	4,534,588
Paul Choffat, JD Head, Consumer Health	750,000					156,000	906,000
Thomas Ebeling, Head, Pharmaceuticals	1,000,000	1,100,000	6,452	10,313	270,271	556,000	6,077,087
Norman Walker, Head, Corporate Human Resources	600,000		8,240	5,858	43,858	153,759	1,804,234

(1) The Restricted Share Awards include the shares granted under the Leveraged Share Savings Plan.

(2) The Unrestricted Share Awards include the shares granted under the Long-Term Performance Plan.

(3) The share options granted provide the right to purchase one share per option. The closing price at grant was CHF 61.90 per share, the exercise price was CHF 62.00 per share. The options have a cliff-vesting period of two years after the date of grant and will expire on March 7, 2011. These tradable share options have a tax value of CHF 9.19 per option, calculated based on the Black-Scholes Method.

(4) Amounts include among others, payments made to the Management Pension Fund, a defined contribution plan.

(5) The total compensation amounts have been calculated using the taxable value of the shares and share options granted.

Under the Novartis Share Option Plan and the Novartis US ADS Incentive Plan described above, a total number of 20,967,700 share options were granted to 6,741 Participants. 11% of the overall number of share options were granted to Executives.

Ownership of Novartis Shares and Share Options by the Executives

The total number of Novartis shares owned as of December 31, 2002 by the Executives and persons closely linked to them was 836,106. The phrase "persons closely linked to them" means (i) their spouse, (ii) their children below age 18, (iii) any legal entities that they own or otherwise control, or (iv) any legal or natural person who is acting as their fiduciary. No Executive owned 1% or more of our outstanding shares.

As of December 31, 2002, the Executives held a total of 3,646,543 Novartis share options. The number of share options, and exercise price were adjusted to reflect the share split of 1:40 in 2001. Broken down by grant year the number of options held are:

Grant Year	Options held (number) ⁽¹⁾	Exercise Price (CHF)	Term life (years)
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Grant Year	Options held (number) ⁽¹⁾	Exercise Price (CHF)	Term life (years)
2002	2,255,723	62.0	9
2001	703,340	70.0	9
2000	461,040	51.3	9
1999	115,400	68.4	9
1998	111,040	42.8	9

(1)

The number of share options held includes share options granted under the Novartis Share Option Plan and the US ADS Incentive Plan.

As of December 31, 2002, the individual ownership of Novartis shares by the Swiss-based Executive Committee members (including persons closely linked to them) were as follows:

Beneficial Owner	Number of shares owned directly or indirectly
Daniel Vasella, MD	316,997
Urs Bärlocher, JD	135,373
Raymund Breu, PhD	174,048
Paul Choffat, JD	750
Thomas Ebeling	44,522
Norman Walker	30,178
Total	701,868

Swiss Employee Benefit Plans

(a) Swiss Pension Fund

The Swiss Pension Fund is a defined benefit fund that provides retirement benefits and risk insurance (covering death or disability). The Swiss Pension Fund is funded by contributions from Group companies and the insured employees. The Swiss Pension Fund insures remuneration up to a maximum of CHF 220,000 per year. The maximum retirement pension is 60% of the insured remuneration after 40 years of contribution. The table below shows the annual pension benefit by Base Salary and Years of

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Service. In 2002 Novartis contributed CHF 9,316 for each of the Swiss-based Executive Committee members.

Base Salary (CHF)	Years of Service					
	15	20	25	30	35	40
100,000	16,938	22,584	28,230	33,876	39,522	45,168
140,000	25,938	34,584	43,230	51,876	60,522	69,168
180,000	34,938	46,584	58,230	69,876	81,522	93,168
220,000	43,938	58,584	73,230	87,876	102,522	117,168
over 220,000	43,938	58,584	73,230	87,876	102,522	117,168

(b) Swiss Management Pension Fund

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The Swiss Management Pension Fund is a defined contribution plan and provides retirement benefits and risk insurance (covering death or disability) for components of remuneration not covered by the Swiss Pension Fund. Employees exceeding the maximum insurable remuneration of the Swiss Pension Fund are eligible for the Swiss Management Pension Fund. The benefits under the Swiss Management Pension Fund are granted in addition to those of the Swiss Pension Fund. The Swiss Management Pension Fund is funded through contributions by Novartis and the employee.

Personal Loans, Consulting, Change of Control and Severance Agreements

Under the provisions of the US Sarbanes-Oxley Act, enacted in July 2002, no new loans may be given to executives. Prior to the Act, loans were granted to two executives totaling CHF 2,060,000. The loans are interest bearing at market rates and are repayable by October 2005.

Four Executives, including Daniel Vasella, have contracts with us granting them 36 months severance pay in the event they are terminated. In addition, if any of these Executives is terminated during the 12 months following a change of control of Novartis, then their 36-month severance rights are extended for an additional 24 months.

Between January 1, 2002 and December 31, 2002, 3 Executives left the company. Under the terms of the agreements with those Executives, CHF 1,287,500 have been paid as severance.

6.C Board Practices

The table below shows the terms of office of our Board of Directors:

Name	Start of Term	End of Term
Daniel Vasella, MD (Chairman)	1996	2004
Prof. Helmut Sihler, JD, PhD (Vice Chairman and Lead Director)	1996	2004
Hans-Jörg Rudloff (Vice Chairman)	1996	2004
Dr. h.c. Birgit Breuel	1996	2005
Prof. Peter Burckhardt, MD	1996	2005
Prof. Ulrich Lehner, PhD	2002	2005
Walter G. Frehner	1996	2004
William W. George	1999	2003
Alexandre F. Jetzer	1996	2005
Pierre Landolt	1996	2005
Heini Lippuner	1996	2004
Prof. Rolf M. Zinkernagel, MD	1999	2003

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Board Committees

Decisions are made by the Board of Directors as a whole. To assist the Board in carrying out its duties four committees have been created: the Chairman's Committee, the Compensation Committee, the Audit and Compliance Committee and the Corporate Governance Committee (the "Board Committees"). Each Board Committee has a written Charter outlining its duties and responsibilities and a chair elected by the Board. The Board Committees meet regularly and are charged with making full reports and recommendations to the Board at its regular meetings. The meeting agendas of the Board Committees are determined by their chairs. The Board Committee members receive in advance of Committee meetings materials allowing them to prepare for the handling of the items on the agenda.

The Chairman's Committee

The Chairman's Committee consists of the Chairman and Chief Executive Officer, the two Vice Chairmen, one of whom is the Lead Director, and such other members as are elected by the Board from time to time. The Chairman's Committee deals with all matters delegated to it according to its Charter. It prepares the agenda for meetings of the Board and can take any preliminary and required action on behalf of the Board. The Chairman's Committee also interfaces with the Executive Committee of Novartis, specifically approving personnel appointments and financial measures which exceed the authority of the Executive Committee but which do not require approval by the full Board.

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Current members of the Chairman's Committee are Dr. Daniel Vasella (Chairman), Prof. Dr. Helmut Sihler, Hans-Jörg Rudloff, Heini Lippuner and William W. George.

The Compensation Committee

The Compensation Committee is composed of three to five independent Directors.

The Compensation Committee reviews and approves our compensation policies and programs, including share option programs and other incentive-based compensation. It is responsible for reviewing and approving the compensation paid to members of the Executive Committee and other selected key executives, and for reviewing the performance of the Chairman and Chief Executive Officer. The Compensation Committee from time to time seeks outside expert advice to support recommendations and decisions.

Current members of the Compensation Committee are Prof. Dr. Helmut Sihler (Chairman), Hans-Jörg Rudloff and William W. George.

The Audit and Compliance Committee

The Audit and Compliance Committee consists of three to five members. The Board of Directors has determined that all of the members of the Committee are independent, as defined by the rules of the New York Stock Exchange. Members of the Committee shall have sufficient financial and compliance experience and ability to enable them to discharge their responsibilities as members. The Committee's main duties are:

To select, evaluate and propose to the Board the external auditors to be nominated for approval by the annual Shareholders' Meeting.

To review annually the external audit scope, audit plans and relevant processes, the results of the external audit, and whether recommendations made have been implemented by our management.

To discuss with the external auditors the results of the audit, any unusual items or disclosures contained in the audit, and the matters required by Statement on Auditing Standards No. 61, as amended.

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To review annually the internal audit scope, audit plans and relevant processes, the results of the internal audit, and whether recommendations made have been implemented by our management.

To review with external and internal auditors, and with our financial and accounting personnel, our accounting policies and financial controls.

To review with management, internal auditors and external auditors any significant risks or exposures we may face, and to assess the steps management has taken to minimize such risks.

To review the annual financial statements and annual report to consider whether they conform to accepted accounting principles and with the standards we have set.

To review the processes and procedures for management's monitoring of our compliance with laws, regulations and with our Code of Conduct, as well as major legislative and regulatory developments that may have a significant impact on us.

To review compliance by our management with those of our policies designated by the Board from time to time, including the Insider Trading Policy.

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To oversee our participation in the Global Compact.

Current members of the Audit and Compliance Committee are Prof. Dr. Helmut Sihler (Chairman), Dr. h.c. Birgit Breuel, Dr. Ulrich Lehner and Walter G. Frehner.

The Corporate Governance Committee

The Corporate Governance Committee consists of three to five independent Directors. The Committee's main duties are:

To develop principles of corporate governance and recommend them to the Board for its approval.

To review periodically the principles of corporate governance approved by the Board to ensure that they remain relevant and are being complied with.

To review the composition and size of the Board in order to ensure the Board has the proper expertise and its membership consists of persons with sufficiently diverse backgrounds.

To determine the criteria for selection of the Chairman and Chief Executive Officer, Directors and Board Committee members.

To plan for continuity on the Board as existing Board members retire or rotate off the Board.

To prepare and annually review succession plans for the Chairman and Chief Executive Officer in case of his resignation, retirement or death.

To evaluate the performance of current Directors proposed for re-election, and recommend to the Board as to whether Directors should stand for re-election.

To conduct an annual evaluation of the Board as a whole.

With the Chairman and Chief Executive Officer, to periodically review the Charter and composition of each Board Committee and make recommendations to the Board for the creation of additional Board Committees or the change in mandate or dissolution of Board Committees.

To ensure that each Board Committee is comprised of Directors suitable for the tasks of the Committee and that each Committee conducts the required number of meetings and makes sufficient reports to the Board on its activities and findings.

Current members of the Corporate Governance Committee are William W. George (Chairman), Prof. Dr. Helmut Sihler, Hans-Jörg Rudloff and Prof. Dr. Rolf Zinkernagel.

Directors Service Contracts

We have no contracts with any of our non-Executive Directors which would provide for benefits upon termination of employment. Daniel Vasella, in his capacity as CEO, is entitled to receive benefits upon termination. See "Item 6. Directors, Senior Management and Employees 6.B Compensation Swiss Employee Benefit Plans" and "Item 6. Directors, Senior Management and Employees 6.B Compensation Personal Loans, Consulting, Change of Control and Severance Agreements."

6.D Employees

The table below sets forth the breakdown of the total average number of our full time equivalent employees by main category of activity and geographic area for the past three years. The totals set forth for 2000 have been adjusted to exclude employees of the divested Agribusiness Division.

For the year ended December 31, 2002 (full time equivalents)	Research & Development	Production & Supply	Marketing & Distribution	General & Administration	Total
Europe	6,320	10,467	11,487	4,306	32,580
The Americas	3,512	8,764	13,733	2,689	28,698
Asia/Africa/Australia	821	2,906	7,873	1,144	12,744
Total	10,653	22,137	33,093	8,139	74,022
For the year ended December 31, 2001 (full time equivalents)	Research & Development	Production & Supply	Marketing & Distribution	General & Administration	Total
Europe	5,804	9,875	10,531	4,734	30,944
The Americas	3,043	9,081	11,750	3,083	26,957
Asia/Africa/Australia	741	3,502	7,146	1,030	12,419
Total	9,588	22,458	29,427	8,847	70,320
For the year ended December 31, 2000 (full time equivalents)	Research & Development	Production & Supply	Marketing & Distribution	General & Administration	Total
Europe	5,627	9,961	9,461	5,662	30,711
The Americas	2,957	9,656	10,941	2,905	26,459
Asia/Africa/Australia	674	3,691	6,537	996	11,898
Total	9,258	23,308	26,939	9,563	69,068

A relatively small number of our employees are represented by unions. We have not experienced any material work stoppages in recent years, and we consider our employee relations to be good.

6.E Share Ownership

The aggregate amount of our shares personally owned by current non-executive Directors and Executives as of December 31, 2002 was 953,884 shares, which amount is less than 1% of our outstanding shares. No individual non-executive Director or Executive owned 1% or more of our outstanding shares. However, our Director Pierre Landolt is also the Chairman of the Board of Directors of Emasan AG. See "Item 7. Major Shareholders and Related Party Transactions 7.A Major Shareholders."

The aggregate amount of Novartis share and ADS options, including other information regarding the options, held by current Directors and the Executives as of December 31st, 2002 is set forth below:

Title of Options	Amount of shares called for	Exercise Price⁽¹⁾ (CHF)	Purchase Price (if any)	Expiration Date	Total number of options held
-------------------------	--	---	--	------------------------	---

	by the options				
Novas07 Options	1	42.80	0	January 15, 2007	131,040
Novas08 Options	1	68.40	0	January 16, 2008	132,600
Novas09 Options	1	51.30	0	March 10, 2009	539,720
Novas10 Options	1	70.00	0	March 7, 2010	626,760
Novas11 Options	1	62.00	0	March 7, 2011	1,822,069
Total Novartis Share Options					3,252,189
Novartis ADS Options Cycle V	1	\$41.97	0	March 7, 2011	167,060
Novartis ADS Options Cycle VI	1	\$37.28	0	March 7, 2012	559,195
Total Novartis ADS Options					726,255

(1) Exercise price indicated is per share.

Novartis Employee Ownership Plans

Pursuant to the Novartis Employee Ownership Plan, which was approved by the Board of Directors in 1998, all employees of our Swiss affiliates are entitled to purchase 120 shares, at a predetermined discount price, after each full year of service. In 2001, the price was set at CHF 12.50 per share. 80 of the shares were freely disposable, and 40 of the shares must be deposited with us until the person concerned leaves the employment, or retires from, the relevant Swiss affiliate. These employees were then required to immediately buy the shares to which they became entitled. During 2002, 2001 and 2000, an aggregate of 406,448, 862,720 and 1,429,520 shares, respectively, were acquired by these employees under this plan.

A new Novartis Employee Ownership Plan was introduced in January 2002 for all employees of our Swiss affiliates, replacing the existing plan. These employees will receive an annual incentive bonus delivered in Novartis shares at a fixed date at the then valid fair market value of the shares (to be delivered in the beginning of March 2003). The new plan will allow these employees to choose to immediately sell either all or half of the shares received, or to keep all the shares for a three year vesting period, at which time we will give the employee one additional free share for every two shares retained and deposited by the employee under this plan.

Beginning January 2002, two share ownership plans were introduced for employees of our UK affiliates. The first is the Novartis UK Share Ownership Plan, a UK Inland Revenue-approved plan set up under a Trust. For every two shares purchased, employees will receive one share free. However, the employee would forfeit the matching share and any tax relief received if the employee were to leave the employ of his or her UK employer within 3 years of the award. If the shares are held in the plan for 5 years or more then the employee will not be liable for any form of tax on either the shares they purchased or the free matching shares. The employee's maximum annual investment under this plan is GBP 1,500.

Under the second UK plan, the Novartis UK Incentive Conversion Plan, employees can invest their net incentive bonus, which is the maximum allowable payment to the Novartis UK Share Ownership Plan. For every two shares purchased the employee will receive one free share. But the employee would forfeit the free share if the employee leaves the employ of his or her UK employer within 3 years of the award.

Item 7. Major Shareholders and Related Party Transactions

7.A Major Shareholders

Based on our share register, we believe that we are not directly or indirectly owned or controlled by another corporation or government, and that there are no arrangements that may result in a change of control.

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As of December 31, 2002, our registered share capital was CHF 1,412,075,000, divided into 2,824,150,000 shares with a nominal value of CHF 0.50 each. Based on our share register, it appears that approximately 77% of our registered shares are held in Switzerland, and approximately 12% of our shares are held in the United States. However, since certain of our shares are held by brokers or other nominees, the above numbers are not representative of the actual number of US and Swiss persons who are beneficial owners of our shares.

As of December 31, 2002 no person or entity was the owner of more than 5% of our shares, whether or not the voting rights of such shares were exercisable. Our largest registered shareholders are Emasan AG (3.1%) and the Novartis Foundation for Employee Participation (3.3%). In 2001, these shareholders held 3.8% and 3.5%, respectively. Both shareholders are entered in the share register with voting rights for their entire shareholdings.

The largest registered nominee shareholder with voting rights is the Depositary for our ADSs, JPMorgan Chase (7.4%), which entered into a nominee agreement with us and disclosed the names, addresses and number of shares of the beneficial owners for whose account it holds the shares. No other nominee shareholders nor any beneficial owner known to us holds more than 2% of our shares.

Shares

We have one class of registered shares. As of December 31, 2002, a total of 2,824,150,000 shares were registered, with a nominal value of CHF 0.50 each. The shares are fully paid-in and non-assessable.

We may issue certificates representing several shares. Shareholders may exchange these certificates at any time for certificates representing smaller numbers of shares, or for individual share certificates. If the owner of the shares consents, we may renounce the printing and delivery of share certificates.

Capital Structure

As of December 31, 2002, our share capital was CHF 1,412,075,000, made up of 2,824,150,000 fully paid-in registered shares, each with the nominal value of CHF 0.50. On March 21, 2002, our shareholders approved a reduction of our share capital by CHF 30,527,340. We have submitted a new proposal to our shareholders, to be voted upon at their next Shareholders Meeting on March 4, 2003, for a further reduction of our share capital by CHF 11,340,000.

As of December 31, 2002, we held 444,251,543 shares in our treasury, calculated in accordance with US GAAP. When calculated in accordance with IAS, the number of treasury shares was 349,179,381. These numbers differ because of varying rules regarding whether shares held by certain foundations, which are independent from Novartis under Swiss company law, must be consolidated with shares held by the Group as treasury shares. US GAAP requires that we consolidate shares held by the employee share participation foundation. This is not required under IAS.

In May 2001 we made available to US investors a direct share purchase and dividend reinvestment program for ADRs through our depositary bank, JPMorgan Chase. See "Item 5. Operating and Financial Review and Prospects 5.B. Liquidity and Capital Resources."

American Depositary Shares

We incorporate by reference the disclosure regarding our ADS program included in the registration statement on Form 20-F/A (File No. I-15024), as filed with the Commission on May 9, 2000, in the section entitled "Part II Item 14. Description of Securities to be Registered American Depositary Receipts."

On May 3, 2001, we filed an Amendment No. 2 to the Amended and Restated Deposit Agreement, dated as of May 7, 2001, pursuant to the Registration Statement on Form F-6 (File No. 333-13446). The Amendment No. 2 changed the ADS-to-share ratio from 40-to-1 to 1-to-1.

On January 31, 2002, we filed a Restricted Issuance Agreement dated as of January 11, 2002, supplementing Amendment No. 2 to the Amended and Restated Deposit Agreement dated as of May 3, 2001, as an exhibit to the Registration Statement on Form F-3 (File No. 333-81862). The Restricted Issuance Agreement supplemented the Deposit Agreement to permit the deposit of restricted ADSs into a parallel facility to the ADR facility established in the Deposit Agreement.

7.B Related Party Transactions

We have formed certain foundations for the purpose of advancing employee welfare, employee share participation, research and charitable contributions. The charitable foundations foster health care and social development in rural countries. The foundations are autonomous, and their boards are responsible for administering the foundations in accordance with the foundations' purpose and applicable law.

The employee share participation foundation has not been included in our consolidated financial statements prepared under IAS, as the International Accounting Standards Committee, Standing Interpretations Committee No. 12, exempts post-employment and equity compensation plans from its scope. The total assets of this foundation, as of December 31, 2002, included 95.1 million of our shares with a market value of approximately CHF 4.8 billion. As of December 31, 2001, the assets included 101.3 million of our shares with a fair market value of CHF 6.1 billion. This foundation has been consolidated with our financial statements under US GAAP, and is included as a reconciling item in the US GAAP reconciliation.

In 2002 we granted short-term loans totaling CHF 875 million to the employee welfare and other foundations and received short-term loans totaling CHF 3 million from them. In 2001, we granted short-term loans totaling CHF 1.2 billion to these foundations and received short-term loans totaling CHF 10 million from them. In 2000 we granted short-term loans totaling CHF 936 million to these foundations, received short-term loans totaling CHF 6 million from them and sold 1.4 million of our shares to them at market rates.

7.C Interests of Experts and Counsel

Not applicable.

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Item 8. Financial Information

8.A Consolidated Statements and Other Financial Information

8.A.1 See Item 18.

8.A.2 See Item 18.

8.A.3 See Report of Independent Accountants, page F-2.

8.A.4 We have complied with this requirement.

8.A.5 Not applicable.

8.A.6 Not applicable.

8.A.7 Legal proceedings.

A number of our affiliates are the subject of litigation arising out of the normal conduct of their business. As a result, claims could be made against them which, in whole or in part, might not be covered by insurance. In our opinion, however, the outcome of these actions will not materially affect our financial position, results of operations or cash flow. In the interest of transparency we are providing information on the following cases:

Augmentin® (amoxicillin/potassium clavulanate): we are involved in a series of lawsuits against affiliates of GlaxoSmithKline (GSK) regarding amoxicillin/potassium clavulanate, our generic version of GSK's Augmentin®. Our US affiliate, Geneva Pharmaceuticals, Inc., launched the first generic version of this GSK product in the US in July 2002, following favorable decisions by the United States District Court for the Eastern District of Virginia invalidating seven patents alleged by GSK to cover its Augmentin® product. GSK has appealed the district court's decision invalidating its patents. GSK has also initiated actions against Geneva and several of our other affiliates (Biochemie GmbH, Biochemie SpA, and Novartis AG) in state court in Colorado and before the United States International Trade Commission, alleging that the potassium clavulanate used in manufacturing the Geneva product is produced using a micro-organism strain allegedly stolen from GSK, an allegation which Geneva and the other Novartis affiliates deny. GSK has also filed a separate lawsuit in state court in North Carolina against our affiliate Lek Pharmaceuticals d.d., alleging that the potassium clavulanate

used in manufacturing the Augmentin® generic product sold by Lek is produced using a micro-organism strain allegedly stolen from GSK, an allegation which Lek denies.

Borison and Diamond: Dr. Borison and Dr. Diamond were clinical investigators who had conducted clinical trials for many pharmaceutical companies, including Ciba-Geigy and Sandoz. Borison and Diamond were indicted by the State of Georgia for diverting payments from pharmaceutical companies from their employer, the Medical College of Georgia, to themselves. The investigation also brought to light allegations relating to informed consent and faulty patient care practices. Borison and Diamond pleaded guilty to a variety of felonies. Several lawsuits, known as Hodges, Huckeba, Lewis and Thomas, were filed against one of our affiliates on behalf of patients who participated in the clinical trials. Of these cases, only three remain. Of these, one, Huckeba, is a purported class action brought on behalf of 185 individuals. The cases are all in the early stages of discovery.

Enteral Pump Investigation: The Department of Justice in the United States is investigating marketing and pricing practices of the enteral pump industry in the US, including whether certain federal criminal statutes have been violated. One of our Medical Nutrition affiliates is a subject of the investigation.

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Parlodel: Since November 1986, Novartis affiliates have been defendants in lawsuits alleging personal injuries resulting from the administration of *Parlodel* for, among other indications, inhibition of post partum lactation. Currently, there are 24 cases pending. They are in various stages of discovery and/or motion practice. Four cases currently have trial dates in 2003.

Pharmaceutical Antitrust Litigation: Novartis affiliates, along with numerous other prescription drug manufacturers, are defendants in various actions brought by certain US retail pharmacies, alleging antitrust and pricing violations.

PPA: Novartis affiliates are parties to over 300 lawsuits in the US brought by people in 2001 and 2002 who claim to have been injured by products containing phenylpropanolamine (PPA) sold by certain of those affiliates. These cases are in various stages of litigation with the first trials set for 2003.

Ritalin: In 2000, one of our affiliates was named as defendant in five class action lawsuits and several personal injury claims involving *Ritalin*. The plaintiffs were consumers and third party payors who alleged that Novartis and others have been involved in "fraud and conspiracy" in the over-promotion of ADHD (attention deficit hyperactive disorder) and *Ritalin*. All of the class actions were dismissed. However, one of these dismissals was reversed on appeal. Only two personal injury claims remain.

SMON: (Subacute Myelo Optico Neuropathy): In 1996 an affiliate of Ciba-Geigy Ltd., one of our predecessor companies, together with two other pharmaceutical companies, settled certain product liability issues related to sales of its product *Clioquinol* in Japan. Under the settlement, one of our affiliates is required to pay certain future health care costs of the claimants.

Terazosin: One of our Generics affiliates is a defendant in a number of lawsuits in the US claiming injuries and damages allegedly arising out of violation of antitrust laws in the settlement, by the affiliate and Abbott Pharmaceuticals, of a contentious patent litigation involving Abbott's Hytrin® and our generic equivalent product.

We believe that our affiliates have meritorious defenses in these cases, and they are vigorously defending each of them.

We maintain general liability insurance, including product liability insurance, covering claims on a worldwide basis. While claims could be made against our affiliates which, in whole or in part, might not be covered by insurance, we believe that our insurance coverage limits and retention amounts are reasonable and prudent in light of our businesses and the risks to which we are subject.

8.A.8 Dividend policy.

Subject to the dividend policy described below, our Board of Directors expects to recommend the payment of a dividend in respect of each financial year. If approved by our shareholders at the relevant annual Shareholders' Meeting, which is normally held in March, the dividends will be payable immediately following such approval. Any shareholder who purchased our shares on or before the second trading day after the shareholders' meeting shall be deemed to be entitled to receive the dividends and, in bonus issues, new shares, and to exercise shareholders' preemption rights to participate in issues of securities. Dividends are reflected in our financial statements in the year in which they are approved by our shareholders.

Our Board's stated policy is that, over the long term, the size of the dividend should be geared to growth in our after-tax earnings. All future dividends paid by us will depend upon our financial condition at the time, the results of our operations and other factors.

The Board will propose a dividend of CHF 0.95 per share to the shareholders for approval at the Annual General Meeting to be held on March 4, 2003. Because we pay dividends in Swiss francs, exchange rate fluctuations will affect the US dollar amounts received by holders of ADSs. For a summary of

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dividends we paid in the past five years, see "Item 3. Key Information 3.A Selected Financial Data Cash Dividends per Share."

8.B Significant Changes

On March 21, 2002, our shareholders approved a reduction of our share capital by CHF 30,527,340. Our share capital is now CHF 1,412,075,000 and is divided into 2,824,150,000 shares with a nominal value of CHF 0.50 each.

We will submit a new proposal to our shareholders, to be voted upon at their next annual Shareholders Meeting on March 4, 2003, for a further reduction of our share capital by CHF 11,340,000, as a means of fully retiring those shares acquired as a result of the share repurchase program announced in July 2002.

Item 9. The Offer and Listing

9.A Listing Details

Our shares are listed in Switzerland on the SWX Swiss Exchange ("SWX"). The principal trading market for our shares is the virt-x, a virtual exchange created by, among others, the SWX. Prior to the creation of virt-x in June 2001, our shares were traded on the SWX. Since 1996, our shares have also been quoted on London's SEAQ International.

American Depositary Shares (ADSs), each representing one share, have been available in the US through an American Depositary Receipts (ADR) program since December 1996. This program was established pursuant to a Deposit Agreement which we entered into with J.P. Morgan Chase & Co. as Depositary (the "Deposit Agreement"). Our ADSs have been listed on the NYSE since May 2000, and are traded under the symbol "NVS."

The table below sets forth, for the periods indicated, the high and low closing sales prices for our shares traded in Switzerland and for ADSs traded in US. The data below regarding our shares reflects price and volume information for trades completed by members of the virt-x (or the SWX, as applicable) during the day as well as for inter-dealer trades completed off the virt-x (or the SWX, as applicable) and certain inter-dealer trades completed during trading on the previous business day. The data below has been adjusted to reflect the 40-for-1 share split and diminution in nominal share value from CHF 20 to CHF 0.50 and the ADS-share ratio change from 40-for-1 to 1-for-1 effective May 7, 2001. Each ADS now represents one share.

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The following share data was taken from virt-x and SWX; the ADS data was taken from Bloomberg:

Shares

ADSs

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	Shares		ADSs	
	High	Low	High	Low
	(CHF per share)		(\$ per ADS)	
Annual information for the past five years				
2002	69.10	49.20	43.83	34.10
2001	74.15	54.95	45.00	32.98
2000 ⁽¹⁾	73.90	49.72	44.94	34.63
1999 ⁽¹⁾	72.95	42.68	53.13	34.63
1998 ⁽¹⁾	69.35	48.30	53.25	35.50
Quarterly information for the past two years				
2002				
First Quarter	66.55	56.60	39.65	34.30
Second Quarter	69.10	58.50	43.83	38.13
Third Quarter	65.30	50.50	43.56	34.10
Fourth Quarter	60.50	50.00	40.62	35.53
2001				
First Quarter	74.15	62.88	44.28	38.14
Second Quarter	72.10	61.30	41.04	35.21
Third Quarter	65.25	54.95	37.58	33.61
Fourth Quarter	65.29	55.80	39.74	34.15
Monthly information for most recent six months				
September 2002	61.45	55.75	41.01	37.67
October 2002	60.50	55.10	40.62	37.15
November 2002	57.00	54.90	39.31	37.64
December 2002	55.30	50.00	37.37	35.53
January 2003	54.00	46.20	39.02	34.54
February 2003 (through February 18)	50.15	48.00	36.15	35.53

⁽¹⁾ Share prices have been revised for 2000, 1999 and 1998, to reflect the share split which occurred on May 7, 2001 resulting in a share : ADS ratio change from 40:1 to 1:1.

Fluctuations in the exchange rate between the Swiss franc and the US dollar will affect any comparisons of Swiss share prices and US ADS prices.

The average daily volumes traded on the virt-x (or the SWX, as applicable) for the years 2002, 2001 and 2000 were 9,744,732, 5,311,320 and 6,648,080 respectively. These numbers were based on total annual turnover statistics supplied by the virt-x (or the SWX as applicable) via the Swiss Market Feed, which supplies such data to subscribers and to other information providers. The average daily volumes traded on the NYSE for the years 2002, 2001 and 2000 were 468,792, 472,108 and 213,131, respectively.

A 2-for-1 share split for the ADSs was affected on May 11, 2000. A 40-for-1 share split of the shares was affected on May 7, 2001 simultaneously with an ADS-to-share ratio change from 40-for-1 to 1-for-1. We believe that the significant increase in trading volume of the shares between 2001 and 2002 was a result of the 40-for-1 share split.

The Depositary has informed us that as of February 11, 2003, there were 94,469,157 ADSs outstanding, each representing one Novartis share (approximately 3.35% of all issued and outstanding shares, including treasury shares). On February 18, 2003, the closing sales price per share on the virt-x was CHF 49.25 and per ADS on the NYSE was \$35.83.

9.B Plan of Distribution

Not applicable.

9.C Market

See "9.A Listing Details."

9.D Selling Shareholders

Not applicable.

9.E Dilution

Not applicable.

9.F Expenses of the Issue

Not applicable.

Item 10. Additional Information

10.A Share capital

Not applicable.

10.B Memorandum and articles of association

The following is a summary of certain provisions of our Articles of Incorporation (the "Articles"), and of the Swiss Code of Obligations (the "Swiss Code"). This is not a summary of all the significant provisions of the Articles or of Swiss law. This summary is qualified in its entirety by reference to the Articles, which are an exhibit to this Form 20-F, and to Swiss law.

10.B.1 *Company Purpose*

Novartis AG is registered in the commercial register of the Canton of Basel-Stadt, Switzerland under number CH-270.3.002.061-2. Our business purpose, as stated in Article 2 of the Articles, is to hold interests in enterprises in the area of health care or nutrition. We may also hold interests in enterprises in the areas of biology, chemistry, physics, information technology or related areas. We may acquire, mortgage, liquidate or sell real estate and intellectual property rights in Switzerland or abroad.

10.B.2 *Directors*

(a) According to our Regulations of the Board (the "Board Regulations"), our Directors may not participate in deliberations or resolutions on matters which affect, or reasonably might affect, the Director's interests, or the interests of a person close to the Director. In addition, while the Swiss Code does not have a specific provision on conflicts of interests, the Swiss Code does require directors and members of senior management to safeguard the interests of the corporation and, in this connection, imposes a duty of care and a duty of loyalty on such persons. This rule is generally interpreted to mean that directors and members of senior management are disqualified from participating in decisions which affect them personally. Directors and officers are personally liable to the corporation for any breach of these provisions.

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(b) Directors may not vote that they receive compensation unless at least a majority of the Directors are present.

(c) The Articles and the Board Regulations contain no specific provision permitting or prohibiting Directors from borrowing from us. The Articles do permit the Board of Directors to pass resolutions with respect to all matters, such as this one, which are not reserved to the authority of the General Meeting of Shareholders by law or by the Articles. In addition, Swiss law contains a provision under which a Director, or any other persons associated with a Director, must refund to the corporation any payments made to them by the corporation, other than payments made at arm's length. Under the provisions of the US Sarbanes-Oxley Act, enacted in July 2002, no new loans may be given to executives. Prior to the Act, loans were granted to two executives totaling CHF 2,060,000. The loans are interest bearing at market rates and are repayable by October 2005.

(d) Directors must retire effective as of the next Ordinary General Meeting of shareholders after they have completed their twelfth year on the Board, or when they reach age 71, whichever comes first. The General Meeting may, under special circumstances, grant an exception from this rule and may elect a Director for another three-year term.

(e) Under the Articles and Swiss law, each of our Directors must also be a shareholder. Ownership of one share is sufficient to satisfy this requirement.

10.B.3 Shareholder Rights

Because we have only one class of registered shares, the following information applies to all shareholders.

(a) Swiss law requires that at least 5% of our annual net profits be retained as general reserves, so long as these reserves amount to less than 20% of our registered share capital. The law and the Articles permit us to accrue additional reserves.

Under Swiss law, we may only pay dividends if we have sufficient distributable retained earnings from previous fiscal years, or if our reserves are sufficient to allow distribution of a dividend. In either event, under Swiss law, while the Board of Directors may propose that a dividend be paid, we may only pay dividends upon shareholder approval at a shareholders' meeting. Our auditors must confirm that the dividend proposal of the Board conforms with the Swiss Code of Obligations and the Articles. Our Board of Directors intends to propose a dividend once each year. See "Item 3. Key Information 3.A. Selected Financial Data Cash Dividends per Share."

Dividends are usually due and payable immediately after the shareholders have passed a resolution approving the payment. Dividends which have not been claimed within five years after the due date fall back to us, and are allocated to our general reserves. For information about deduction of the withholding tax from dividend payments, see "Item 10. Additional Information 10.E Taxation."

(b) Each share is entitled to one vote at the shareholders' meeting. A shareholder may exercise its right to vote its shares only after the shareholder has been recorded in the share register as being entitled to such rights at least 20 days in advance. In order to do so, the shareholder must file a share registration form with us at least 20 days in advance, setting forth the shareholder's name, address and citizenship (or, in the case of a legal entity, its registered office). If the shareholder has not filed the form at least 20 days in advance, then the shareholder may not vote at, or participate in, shareholders' meetings.

To vote its shares, the shareholder must also explicitly declare that it has acquired the shares in its own name and for its own account. If the shareholder refuses to make such a declaration, the shares may not be voted unless the Board of Directors grants voting rights to a nominee for those shares. The Board of Directors may grant such nominees the right to vote up to 0.5% of the total number of registered shares.

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No shareholder or group of shareholders may vote more than 2% of the registered shares. If a shareholder holds more than 2% of Novartis' shares, that shareholder will be entitled to register the excess shares, but not to cast votes based upon them.

For purposes of the 2% rule for shareholders and the 0.5% rule for nominees, groups of companies and groups of shareholders acting in concert are considered to be one shareholder. The Board of Directors may, on a case by case basis, allow exceptions from both the 2% rule for shareholders and the 0.5% rule for nominees. The Board may delegate this power. To date, such a request has never been denied. Finally, the shareholders may cancel the voting restrictions upon a resolution carrying a two-thirds majority of the vote at a shareholders meeting.

After hearing the registered shareholder or nominee, the Board of Directors may cancel, with retroactive effect as of the date of registration, the registration of shareholders if the registration was effected based on false information.

Shareholders' resolutions generally require the approval of a majority of the votes present at a shareholders' meeting. As a result, abstentions have the effect of votes against the resolution. Shareholders' resolutions requiring a vote by such "absolute majority" include (1) amendments to the Articles; (2) elections of directors and statutory auditors; (3) approval of the annual report and the annual accounts; (4) setting the annual dividend; (5) decisions to discharge directors and management from liability for matters disclosed to the shareholders' meeting; and (6) the ordering of an independent investigation into specific matters proposed to the shareholders' meeting.

According to the Articles and Swiss law, the following types of shareholders' resolutions require the approval of a "supermajority" of at least two-thirds of the votes present at a shareholders' meeting: (1) an alteration of our corporate purpose; (2) the creation of shares with increased voting powers; (3) an implementation of restrictions on the transfer of registered shares and the removal of such restrictions; (4) an

authorized or conditional increase of the share capital; (5) an increase of the share capital by conversion of equity, by contribution in kind, or for the purpose of an acquisition of property or the grant of special rights; (6) a restriction or an elimination of shareholders' preemptive rights; (7) a change of our domicile; (8) our dissolution without liquidation (*e.g.*, by a merger); or (9) any amendment to the Articles which would create or eliminate a supermajority requirement.

At shareholders' meetings, shareholders can be represented by proxy. However, a proxy must either be the shareholder's legal representative, another shareholder with the right to vote, a proxy appointed by us, an independent representative nominated by us, or a depositary. Votes are taken either by a show of hands or by electronic voting, unless the shareholders' meeting resolves to have a ballot or where a ballot is ordered by the chairman of the meeting.

The Directors' terms of office are coordinated so that in each year approximately one-third of all the Directors are subject to re-election or election. However, cumulative voting of shares is not permitted under Swiss law.

(c) Shareholders have the right to allocate the profit shown on our balance sheet by vote taken at the General Meeting of the Shareholders, subject to the legal requirements described in Item 10.B.3(a).

(d) Under Swiss law, any surplus arising out of a liquidation of our company (*i.e.*, after the settlement of all claims of all creditors) would be distributed to the shareholders in proportion to the paid-in nominal value of their shares.

(e) Swiss law limits a corporation's ability to hold or repurchase its own shares. We and our subsidiaries may only repurchase shares if we have free reserves equal to the purchase price to be paid for the shares. The aggregate nominal value of all Novartis shares held by us and our subsidiaries may not exceed 10% of the nominal value of our share capital. In addition, we are required to create a special reserve on our balance sheet in the amount of the purchase price of the acquired shares. Repurchased shares held by us or our subsidiaries do not carry any rights to vote at the shareholders' meeting, but are entitled to the economic benefits generally connected with the shares. It should be noted that the

definition of what constitutes subsidiaries, and therefore, treasury shares, for purposes of the above described reserves requirement and voting restrictions differs from the definition included in the consolidated financial statements. The definition in the consolidated financial statements requires consolidation for financial reporting purposes of special purpose entities, irrespective of their legal structure, in instances where we have the power to govern the financial and operating policies of the entity so as to obtain benefits from its activities.

We may also repurchase shares for the purpose of capital reduction, which can only take place if the shareholders pass a resolution approving such reduction. We intend to propose to the next shareholders' meeting a reduction of our share capital of CHF 11,340,000.

(f) Not applicable.

(g) Since all of our issued and outstanding shares have been fully paid in, we can make no further capital calls on our shareholders.

(h) See Items 10.B.3(b) and 10.B.7.

10.B.4 Changes To Shareholder Rights

Under Swiss law, we may not issue new shares without the prior approval of the shareholders. If a new issue is approved, then our shareholders would have certain preemptive rights to obtain newly issued shares in an amount proportional to the nominal value of the shares they already hold. These preemptive rights could be modified in certain limited circumstances with the approval of a resolution adopted at a shareholders' meeting by a supermajority of shares. In addition, we may not create shares with increased voting powers or place restrictions on the transfer of registered shares without the approval of a resolution adopted at a shareholders' meeting by a supermajority of shares. In addition, see Item 10.B.3(b) with regard to the Directors' ability to cancel the registration of shares under limited circumstances.

10.B.5 Shareholder Meetings

Under Swiss law and the Articles, we must hold an annual ordinary shareholders' meeting within six months after the end of our financial year. Shareholders' meetings may be convened by the Board of Directors or, if necessary, by the statutory auditors. The Board is further required to convene an extraordinary shareholders' meeting if so resolved by a shareholders meeting, or if so requested by shareholders holding an aggregate of at least 10% of the registered shares, specifying the items for the agenda and their proposals. Shareholders holding shares with a

nominal value of at least CHF 1,000,000 (*i.e.*, 2,000,000 Novartis shares) have the right to request that a specific proposal be put on the agenda and voted upon at the next shareholders meeting. A shareholders' meeting is convened by publishing a notice in the Swiss Official Commercial Gazette (*Schweizerisches Handelsamtsblatt*) at least 20 days prior to such meeting. Shareholders may also be informed by mail. There is no provision in the Articles requiring a quorum for the holding of a shareholders' meeting. In addition see Item 10.B.3(b) regarding conditions for exercising a shareholder's right to vote at a shareholders' meeting.

10.B.6 Limitations

There are no limitations under Swiss law or our Articles on the right of non-Swiss residents or nationals to own or vote shares other than the restrictions applicable to all shareholders.

10.B.7 Change in Control

According to the Articles and the Swiss Code, shareholders may pass a resolution to merge with another corporation at any time. Such a resolution would require the consent of at least two-thirds of all votes present at the necessary shareholders' meeting.

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Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who acquire more than 33¹/₃% of the voting rights of Novartis shares would be required to submit a takeover bid to all remaining shareholders. This mandatory bid obligation may be waived by the Swiss Takeover Board or the Swiss Federal Banking Commission under certain circumstances, in particular if another shareholder owns a higher percentage of voting rights than the acquirer. If no waiver is granted, the mandatory takeover bid would have to be made pursuant to the procedural rules set forth in the Swiss Stock Exchange Act and the ordinances enacted thereunder.

10.B.8 Disclosure of Shareholdings

Under the Swiss Stock Exchange Act, holders of our voting shares would be required to notify us and the SWX of the level of their holdings whenever such holdings reach or exceed, or in some cases, fall short of, certain thresholds 5%, 10%, 20%, 33¹/₃%, 50% and 66²/₃% of our registered share capital, whether or not the shareholder has the right to cast votes based on the shares. Following receipt of such notification we would be required to inform the public by publishing the information in the Swiss Official Commercial Gazette and in at least one of the principal electronic media that disseminate stock exchange information.

An additional disclosure obligation exists under Swiss law which requires us to disclose the identity of all of our shareholders (or related groups of shareholders) who have been granted an exception entitling them to vote more than 2% of our shares, as described in Item 10.B.3(b). Under Swiss law, disclosure of shareholders entitled to vote more than 2% but less than 5% of our shares must only be made once a year, in the notes to the financial statements published in our annual report.

10.B.9 Differences in the Law

See the references to Swiss law throughout this Item 10.B, which highlight certain key differences between Swiss and US law.

10.B.10 Changes in Capital

The requirements of the Articles regarding changes in capital are not more stringent than the requirements of Swiss law.

10.C Material contracts

On December 2, 1999, we signed a Master Agreement with AstraZeneca to spin-off and merge our Crop Protection and Seeds businesses with AstraZeneca's Zeneca Agrochemicals business to create Syngenta. This agreement was amended and restated on September 7, 2000, and the transaction closed in November 2000. Our Agribusiness sector, which was made up of Crop Protection and Seeds, is accordingly shown as a discontinued activity. There are no other material contracts other than those entered into in the ordinary course of business.

10.D Exchange controls

There are no Swiss governmental laws, decrees or regulations that restrict the export or import of capital, including any foreign exchange controls, or that affect the remittance of dividends or other payments to non-residents or non-citizens of Switzerland who hold Novartis' shares.

10.E Taxation

The taxation discussion set forth below is intended only as a descriptive summary and does not purport to be a complete analysis or listing of all potential tax effects relevant to the ownership or

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disposition of our shares or ADSs. The statements of US and Swiss tax laws set forth below are based on the laws and regulations in force as of the date of this 20-F, including the current Convention Between the United States and the Swiss Confederation for the Avoidance of Double Taxation with Respect to Taxes on Income, entered into force on December 19, 1997 (the "Treaty"), and the US Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations, rulings, judicial decisions and administrative pronouncements, and may be subject to any changes in US and Swiss law, and in any double taxation convention or treaty between the United States and Switzerland occurring after that date, which changes may have retroactive effect.

Swiss Taxation

Swiss Residents

Withholding Tax on Dividends and Distributions. Dividends which we pay and similar cash or in-kind distributions which we may make to a holder of shares or ADSs (including distributions of liquidation proceeds in excess of the nominal value, stock dividends and, under certain circumstances, proceeds from repurchases of shares by us in excess of the nominal value) are subject to a Swiss federal withholding tax (the "Withholding Tax") at a current rate of 35%. We are required to withhold this Withholding Tax from the gross distribution and to pay the Tax to the Swiss Federal Tax Administration. The Withholding Tax is refundable in full to Swiss residents who are the beneficial owners of the taxable distribution at the time it is resolved and duly report the gross distribution received on their personal tax return or in their financial statements for tax purposes, as the case may be.

Income Tax on Dividends. A Swiss resident who receives dividends and similar distributions (including stock dividends and liquidation surplus) on shares or ADSs is required to include such amounts in the shareholder's personal income tax return. A corporate shareholder may claim substantial relief from taxation of dividends and similar distributions received if the shares held represent a fair market value of at least CHF 2 million.

Capital Gains Tax upon Disposal of shares. Under current Swiss tax law, the gain realized on shares held by a Swiss resident who holds shares or ADSs as part of his private property is generally not subject to any federal, cantonal or municipal income taxation on gains realized on the sale or other disposal of shares or ADSs. However, gains realized upon a repurchase of shares by us may be characterized as taxable dividend income if certain conditions are met. Book gains realized on shares or ADSs held by a Swiss corporate entity or by a Swiss resident individual as part of the shareholder's business property are included in the taxable income of such person.

Residents of Other Countries

Recipients of dividends and similar distributions on the shares who are neither residents of Switzerland for tax purposes nor holding shares as part of a business conducted through a permanent establishment situated in Switzerland ("Non-resident Holders") are not subject to Swiss income taxes in respect of such distributions. Moreover, gains realized by such recipients upon the disposal of shares are not subject to Swiss income taxes.

Non-resident Holders of shares are, however, subject to the Withholding Tax on dividends and similar distributions mentioned above and under certain circumstances to the Stamp Duty described below. Such Non-resident Holders may be entitled to a partial refund of the Withholding Tax if the country in which they reside has entered into a bilateral treaty for the avoidance of double taxation with Switzerland. Non-resident Holders should be aware that the procedures for claiming treaty refunds (and the time frame required for obtaining a refund) may differ from country to country. Non-resident Holders should consult their own tax advisors regarding receipt, ownership, purchase, sale or other dispositions of shares or ADSs and the procedures for claiming a refund of the Withholding Tax.

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As of January 1, 2003, Switzerland has entered into bilateral treaties for the avoidance of double taxation with respect to income taxes with the following countries, whereby a part of the above-mentioned Withholding Tax may be refunded (subject to the limitations set forth in such treaties):

Albania	Greece	Luxembourg	Slovak Republic
Australia	Hungary	Macedonia	Slovenia
Austria	Iceland	Malaysia	South Africa
Belarus	India	Mexico	Spain
Belgium	Indonesia	Moldavia	Sri Lanka
Bulgaria	Italy	Morocco	Sweden
Canada	Ivory Coast	Netherlands	Thailand
China	Republic of Ireland	New Zealand	Trinidad and Tobago
Croatia	Jamaica	Norway	Tunisia
Czech Republic	Japan	Pakistan	Ukraine
Denmark	Kazakhstan	Philippines	United Kingdom
Ecuador	Republic of Korea	Poland	United States of America
Egypt	(South Korea)	Portugal	Venezuela
Finland	Kuwait	Romania	Vietnam
France	Kyrgyzstan	Russia	Commonwealth of
Germany	Latvia	Singapore	Independent States ⁽¹⁾

(1) Excluding Estonia, Latvia, Lithuania and Russia.

Tax treaty negotiations are under way, or have been concluded, with Argentina (treaty not yet in force but provisionally applicable as from January 1, 2001), Armenia, Azerbaijan, Bangladesh, Brazil, Chile, Ethiopia, Estonia, Georgia, Israel, Lithuania, Turkey, Turkmenistan, Uzbekistan, and Zimbabwe.

A Non-resident Holder of shares or ADSs will not be liable for any Swiss taxes other than the Withholding Tax described above and the Stamp Duty described below if the transfer occurs through or with a Swiss bank or other Swiss securities dealer. If, however, the shares or ADSs of Non-resident Holders can be attributed to a permanent establishment or a fixed place of business maintained by such person within Switzerland during the relevant tax year, the shares or ADSs may be subject to Swiss income taxes in respect of income and gains realized on the shares or ADSs and such person may qualify for a full refund of the Withholding Tax based on Swiss tax law.

Residents of the United States. A Non-resident Holder who is a resident of the United States for purposes of the Treaty is eligible for a reduced rate of tax on dividends equal to 15% of the dividend, provided that such holder (i) qualifies for benefits under the Treaty, (ii) holds, directly and indirectly, less than 10% of our voting stock, and (iii) does not conduct business through a permanent establishment or fixed base in Switzerland to which the shares or ADSs are attributable. Such an eligible holder must apply for a refund of the amount of the Withholding Tax in excess of the 15% Treaty rate. The claim for refund must be filed on Swiss Tax Form 82 (82C for corporations; 82I for individuals; 82E for other entities), which may be obtained from any Swiss Consulate General in the United States or from the Federal Tax Administration of Switzerland at the address below, together with an instruction form. Four copies of the form must be duly completed, signed before a notary public of the United States, and sent to the Federal Tax Administration of Switzerland, Eigerstrasse 65, CH-3003 Berne, Switzerland. The form must be accompanied by suitable evidence of deduction of Swiss tax withheld at source, such as certificates of deduction, signed bank vouchers or credit slips. The form may be filed on or after July 1 or January 1 following the date the dividend was payable, but no later than December 31 of the third year following the calendar year in which the dividend became payable. For US resident holders of ADSs, J.P. Morgan Chase & Co. as Depositary, will comply with these Swiss procedures on behalf of the holders, and will remit the net amount to the holders.

Stamp Duty upon Transfer of Securities. The sale of shares, whether by Swiss residents or Non-resident Holders, may be subject to federal securities transfer Stamp Duty of 0.15%, calculated on the sale proceeds, if the sale occurs through or with a Swiss bank or other Swiss securities dealer, as defined in the Swiss Federal Stamp Duty Act. The Stamp Duty has to be paid by the securities dealer and may be charged to the parties in a taxable transaction who are not securities dealers. Stamp Duty may also be due if a sale of shares occurs with or through a non-Swiss bank or securities dealer, provided (i) such bank or dealer is a member of the SWX, and (ii) the sale takes place on the SWX. In addition to this Stamp Duty, the sale of shares by or through a member of the SWX may be subject to a minor stock exchange levy.

United States Federal Income Taxation

The following is a general discussion of the material US federal income tax consequences of the ownership and disposition of our shares or ADSs that may be relevant to you if you are a US Holder (as defined below). Because this discussion does not consider any specific circumstances of any particular holder of our shares or ADSs, persons who are subject to US taxation are strongly urged to consult their own tax advisers as to the overall US federal, state and local tax consequences, as well as to the overall Swiss and other foreign tax consequences, of the ownership and disposition of our shares or ADSs. In particular, additional rules may apply to dealers in securities, tax-exempt entities, certain insurance companies, broker-dealers, investors liable for alternative minimum tax, investors that hold shares or ADSs as part of a straddle, hedging or conversion transaction, holders whose functional currency is not the US dollar, and holders of 10% or more of our outstanding share capital or voting power. This discussion generally applies only to US Holders who qualify for benefits under the Treaty, who hold the shares as a capital asset, and whose functional currency is the US dollar. Investors are urged to consult their own tax advisors concerning whether they are eligible for benefits under the Treaty.

For purposes of this discussion, a "US Holder" is a beneficial owner of Novartis shares or ADSs who is (i) an individual citizen or resident of the United States for US federal income tax purposes, (ii) a corporation or other entity created or organized under the laws of the United States or a state thereof, (iii) an estate the income of which is subject to US federal income taxation regardless of its source, or (iv) a trust subject to the primary supervision of a US court and the control of one or more US persons. If a partnership holds shares or ADSs, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. If a US Holder is a partner in a partnership that holds shares or ADSs, the Holder is urged to consult its own tax advisor regarding the specific tax consequences of owning and disposing of such shares or ADSs.

This discussion assumes that each obligation in the Deposit Agreement and any related agreement will be performed in accordance with its terms.

Dividends. For US federal income tax purposes, US Holders will be required to include the full amount (including the amount of any Withholding Tax) of a dividend paid with respect to our shares or ADSs as ordinary income. For this purpose, a "dividend" will include any distribution paid by us with respect to our shares or ADSs (other than certain distributions of our capital stock or rights to subscribe for shares of our capital stock), as the case may be, but only to the extent such distribution is not in excess of our current and accumulated earnings and profits, as determined for US federal income tax purposes, based on the US dollar value of the distribution calculated by reference to the spot rate in effect on the date the distribution is actually or constructively received by a US Holder, in the case of shares, or by the Depositary, in the case of ADSs. Such dividend will constitute income from sources outside the United States. Subject to the limitations and conditions provided in the Code, US Holders may deduct from their US federal taxable income, or claim as a credit against their US federal income tax liability, the 15% withholding tax withheld pursuant to the Treaty. The rules governing the foreign tax credit are complex. Each US Holder is urged to consult its own tax advisor concerning whether, and to what extent, a foreign tax credit will be available under the Treaty with respect to dividends received from us. Under the Code, dividend payments by us on the shares or ADSs are not eligible for the dividends received deduction.

generally allowed to corporate shareholders. Any distribution that exceeds our earnings and profits will be treated as a nontaxable return of capital to the extent of the US Holder's tax basis in the shares or ADSs, thus reducing the Holder's tax basis in such shares or ADSs and, thereafter, as capital gain.

In general, a US Holder will be required to determine the amount of any dividend paid in Swiss francs by translating the Swiss francs into US dollars at the spot rate on the date of receipt. The tax basis of Swiss francs received by a US Holder of shares generally will equal the US dollar equivalent of such Swiss francs at the spot rate on the date such Swiss francs are received. Upon subsequent exchange of such Swiss francs for US dollars, or upon the use of such Swiss francs to purchase property, you will generally recognize exchange gain or loss equal to the difference between your tax basis for the Swiss francs and the US dollars received or, if property is received, the fair value of the property on the date of the exchange.

Sale or Other Disposition. Upon a sale or exchange of shares or ADSs, US Holders generally will recognize capital gain or loss in an amount equal to the difference between the amount realized on the disposition and the US Holder's tax basis in the shares or ADSs. This capital gain or loss will be long-term capital gain or loss if the holding period in the shares or ADSs exceeds one year. The deductibility of capital losses is subject to significant limitations. If the US Holder is an individual, any capital gain generally will be subject to US federal income tax at preferential rates if the US Holder meets the specified minimum holding periods. Such gain or loss, if any, generally will be US source gain or loss.

United States Information Reporting and Backup Withholding. Dividend payments with respect to shares or ADSs and proceeds from the sale, exchange or other disposition of shares or ADSs may be subject to information reporting to the Internal Revenue Service ("IRS") and possible US backup withholding at a current rate of 30%. Certain exempt recipients (such as corporations) are not subject to these information

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reporting requirements. Backup withholding will not apply, however, to a Holder who furnishes a correct taxpayer identification number or certificate of foreign status and makes any other required certification or who is otherwise exempt from backup withholding. Any US Holders required to establish their exempt status generally must provide IRS Form W-9 (Request for Taxpayer Identification Number and Certification). Non-US holders are generally not subject to US information or backup withholding. However, such holders may be required to provide certification of non-US status in connection with payments received in the United States or through US-related financial intermediaries. Amounts withheld as backup withholding may be credited against a Holder's federal income tax liability, and a Holder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS and furnishing any required information.

10.F Dividends and paying agents

Not applicable.

10.G Statement by experts

Not applicable.

10.H Documents on display

Any statement in this Form 20-F about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to the Form 20-F the contract or document is deemed to modify the description contained in this Form 20-F. You must review the exhibits themselves for a complete description of the contract or document.

You may review a copy of our filings with the U.S. Securities and Exchange Commission (the "SEC"), including exhibits and schedules filed with it, at the SEC's public reference facilities in Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information. In addition, the SEC maintains an Internet site at <http://www.sec.gov> that contains

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reports and other information regarding issues that file electronically with the SEC. These SEC filings are also available to the public from commercial document retrieval services.

WE ARE REQUIRED TO FILE REPORTS AND OTHER INFORMATION WITH THE SEC UNDER THE SECURITIES EXCHANGE ACT OF 1934. REPORTS AND OTHER INFORMATION FILED BY U.S. WITH THE SEC MAY BE INSPECTED AND COPIED AT THE SEC'S PUBLIC REFERENCE FACILITIES DESCRIBED ABOVE. AS A FOREIGN PRIVATE ISSUER, WE ARE EXEMPT FROM THE RULES UNDER THE EXCHANGE ACT PRESCRIBING THE FURNISHING AND CONTENT OF PROXY STATEMENTS AND OUR OFFICERS, DIRECTORS AND PRINCIPAL SHAREHOLDERS ARE EXEMPT FROM THE REPORTING AND SHORT-SWING PROFIT RECOVERY PROVISIONS CONTAINED IN SECTION 16 OF THE EXCHANGE ACT. UNDER THE EXCHANGE ACT, AS A FOREIGN PRIVATE ISSUER, WE ARE NOT REQUIRED TO PUBLISH FINANCIAL STATEMENTS AS FREQUENTLY OR AS PROMPTLY AS UNITED STATES COMPANIES.

In addition, material filed by us with the SEC can be inspected at the offices of the New York Stock Exchange at 20 Broad Street, New York, New York 10005 and at the offices of JPMorgan & Chase Bank, as Depositary of our ADR Program, at P.O. Box 842006, Boston, MA 02284 (telephone: 1-877-816-5333).

10.I Subsidiary Information

Not applicable.

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Item 11. Quantitative and Qualitative Disclosures about Non-Product-Related Market Risk

	Local Currencies	CHF
2002		
Growth and currency contribution		
Sales	11%	2%
Operating income	10%	8%
Net income	4%	4%
	Sales	Costs
Sales and operating costs by currencies:		
\$	43%	32%
Euro	25%	25%
CHF	5%	21%
Yen	8%	6%
Other	19%	16%
	100%	100%
	Liquid Funds	Financial Debt
Liquid funds and financial debt by currencies:		
\$	8%	31%
Euro	24%	6%
CHF	64%	37%
Yen	1%	20%
Other	3%	6%
	100%	100%
	Local Currencies	CHF
2001		
Growth and currency contribution		
Sales	14%	10%
Operating income	9%	8%
Net income	8%	8%

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	Sales	Costs
Sales and operating costs by currencies:		
\$	45%	31%
Euro	23%	22%
CHF	5%	26%
Yen	8%	5%
Other	19%	16%
	100%	100%
	Liquid funds	Financial debt
Liquid funds and financial debt by currencies:		

	Liquid funds	Financial debt
\$	8%	46%
Euro	35%	4%
CHF	55%	21%
Yen		24%
Other	2%	5%
	100%	100%

Market Risk

In addition to market risk regarding our products, we are exposed to market risk regarding our liquid assets and investments, primarily related to foreign exchange, interest rates and market value of the investments of liquid funds. We actively monitor these exposures. To manage the volatility relating to these exposures, we enter into a variety of derivative financial instruments. Our objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in interest rates, foreign currency rates and market rates of investments of liquid funds. It is our policy and practice to use derivative financial instruments to manage exposures and to enhance the yield on the investment of liquid funds. We do not enter any financial transactions containing a risk that cannot be quantified at the time the transaction is concluded. We only sell existing assets in transactions and future transactions (in the case of anticipatory hedges) which we confidently expect we will have in the future based on past experience. In the case of liquid funds, we write call options on assets we have or we write put options on positions we want to acquire and have the liquidity to acquire. We expect that any loss in value for those instruments generally would be offset by increases in the value of the underlying transactions.

Foreign exchange rates: We use the Swiss franc as our reporting currency and we are therefore exposed to foreign exchange movements, primarily in US, European, Japanese, other Asian and Latin American currencies. Consequently, we enter into various contracts which change in value as foreign exchange rates change, to preserve the value of assets, commitments and anticipated transactions. We use forward contracts and foreign currency option contracts to hedge certain anticipated net revenues in foreign currencies.

On December 31, 2002, we had long and short forward exchange/option contracts with equivalent values of CHF 12.0 billion and CHF 10.9 billion, respectively. At December 31, 2001, we had long and short forward exchange/option contracts with equivalent values of CHF 7.1 billion and CHF 13.3 billion, respectively.

Net investments in foreign countries are long-term investments. Their fair value changes through movements of the currency exchange rates. In the very long term, however, the difference in the inflation

rate should match the exchange rate movement, so that the market value of the real assets abroad should compensate for the change due to currency movements. For this reason, we only hedge the net investments in foreign subsidiaries in exceptional cases.

Commodities: We have only a very limited exposure to price risk related to anticipated purchases of certain commodities used as raw materials by our businesses. A change in those prices may alter the gross margin of a specific business, but generally by not more than 10% of the margin and thus below materiality levels. Accordingly, we do not enter into significant commodity future, forward and option contracts to manage fluctuations in prices of anticipated purchases.

Interest rates: We manage our net exposure to interest rate risk through the proportion of fixed rate debt and variable rate debt in our total debt portfolio. To manage this mix, we may enter into interest rate swap agreements, in which we exchange the periodic payments, based on a notional amount and agreed-upon fixed and variable interest rates. Our percentage of fixed rate debt to total financial debt was 46%, 46% and 34% at December 31, 2002, 2001 and 2000, respectively.

Equity risk: We purchase equities as investments of our liquid funds. As a policy, we limit our holdings in an unrelated company to less than 5% of our liquid funds. Potential investments are thoroughly analyzed in respect of their past financial track record (mainly cash flow return on investment), their market potential, their management and their competitors. Call options are written on equities which we own and put options are written on equities which we want to buy and for which cash has been reserved.

Management summary: Use of the above-mentioned derivative financial instruments has not had a material impact on our financial position at December 31, 2002 and 2001 or on the results of our operations for the years ended December 31, 2002 and 2001.

Value at risk: We use a value at risk ("VAR") computation to estimate the potential ten-day loss in the fair value of our interest rate-sensitive financial instruments, the loss in pre-tax earnings of our foreign currency price-sensitive derivative financial instruments, and the potential ten-day loss of our equity holdings. We use a ten-day period because it is assumed that not all positions could be undone in a single day, given the size of the positions. The VAR computation includes our debt, short-term and long-term investments, foreign currency forwards, swaps and options and anticipated transactions. Foreign currency trade payables and receivables, and net investments in foreign subsidiaries are excluded from the computation.

The VAR estimates are made assuming normal market conditions, using a 95% confidence interval. We use a "Delta Normal" model to determine the observed inter-relationships between movements in interest rates, stock markets and various currencies. These inter-relationships are determined by observing interest rate, stock market movements and forward currency rate movements over a 60-day period for the calculation of VAR amounts.

The estimated potential ten-day loss in fair value of our interest rate-sensitive instruments, primarily debt and investments of liquid funds under normal market conditions, the estimated potential ten-day loss

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in pre-tax earnings from foreign currency instruments under normal market conditions, and the estimated potential ten-day loss on our equity holdings, as calculated in the VAR model, follow:

	At December 31,	
	2002	2001
	(CHF millions)	
Instruments sensitive to foreign currency rates	180	226
Instruments sensitive to equity market movements	591	224
Instruments sensitive to interest rates	132	64
All instruments	714	324

The average, high, and low VAR amounts for 2002 are as follows:

	Average	High	Low
	(CHF millions)		
Instruments sensitive to foreign currency rates	178	281	120
Instruments sensitive to equity market movements	428	826	228
Instruments sensitive to interest rates	179	228	129
All instruments	580	999	403

The VAR computation is a risk analysis tool designed to statistically estimate the maximum probable ten-day loss from adverse movements in interest rates, foreign currency rates and equity prices under normal market conditions. The computation does not purport to represent actual losses in fair value or earnings to be incurred by us, nor does it consider the effect of favorable changes in market rates. We cannot predict actual future movements in such market rates and do not present these VAR results to be indicative of future movements in such market rates or to be representative of any actual impact that future changes in market rates may have on our future results of operations or financial position.

In addition to these VAR analyses, we use stress-testing techniques. Such stress-testing is aimed at reflecting a worst case scenario. For these calculations, we use the worst movements during a period of six months over the past 20 years in each category. For 2002 and 2001, the worst case loss scenario was configured as follows:

At December 31,

	At December 31,	
	2002	2001
	(CHF millions)	
Bond portfolio	1,167	895
Money market and linked financial instruments	148	457
Equities	1,077	817
Foreign exchange risks	475	151
Total	2,867	2,320

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In our risk analysis, we consider this worst case scenario acceptable inasmuch as it could reduce the income, but would not endanger the solvency and/or the investment grade credit standing of the Group. While it is highly unlikely that all worst case fluctuations would happen simultaneously, as shown in the model, the actual market can, of course, produce bigger movements in the future.

The major financial risks are managed centrally by our Group Treasury. Only residual risks and some currency risks are managed by our affiliates. The collective amount of the residual risks is, however, below 10% of the global risks.

We have a written Treasury Policy, have implemented a strict segregation of front office and back office controls, and do random checks of our positions with the counter parties. In addition, internal audits of the Treasury function are performed at regular intervals.

Item 12. Description of Securities other than Equity Securities

Not applicable.

Part II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and use of Proceeds

None.

Item 15. Controls and Procedures.

Novartis AG's chief executive officer and chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-14(c)) within 90 days of the date of this Form 20-F, have concluded that, as of such date, our disclosure controls and procedures were effective to ensure that material information relating to Novartis AG was made known to them by others within the company, particularly during the period in which this Form 20-F was being prepared.

There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date the chief executive officer and chief financial officer completed their evaluation, nor were there any significant deficiencies or material weaknesses in our internal controls requiring corrective actions.

Item 16. [Reserved]**Part III****Item 17. Financial Statements**

Not applicable.

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Item 18. Financial Statements

The following financial statements are filed as part of this annual report on Form 20-F.

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Consolidated income statements	F-3
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Consolidated statement of changes in equity	F-6
Notes to the consolidated financial statements	F-7
Report of PricewaterhouseCoopers AG on financial statement schedule	F-89
Schedule II valuation and qualifying accounts	F-90

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Item 19. Exhibits

- 1.1 Articles of Association, as amended March 21, 2002 (in English translation).
- 1.2 Regulations of the Board and Committee Charters of Novartis AG, as amended August 21, 2002.
- 2.1 Restricted Issuance Agreement dated as of January 11, 2002 among Novartis AG, J.P. Morgan Chase & Co., as depositary, and all holders from time to time of ADRs issued thereunder (incorporated by reference from the Registration Statement on Form F-3, File No. 333-81862, as filed with the Commission on January 31, 2002).
- 4.1

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Master Agreement dated December 2, 1999 between Novartis AG and AstraZeneca PLC, as amended and restated on September 7, 2000 (incorporated by reference from Syngenta AG's Registration Statement on Form F-1, File No. 333-12640, as filed with the Commission on September 29, 2000).

4.2

The Leveraged Stock Saving Plan, Plan Summary January 2002.

4.3

Agreement dated December 20, 2001 between Novartis International AG and Paul Choffat.

6.1

For Earnings per share calculation, see note 7 to our consolidated financial statements.

8.1

For a list of all of our subsidiaries, see note 30 to our consolidated financial statements.

10.1

Consent of PricewaterhouseCoopers AG to the incorporation by reference of the audit report contained in this Form 20-F into Novartis AG's Registration Statement on Form F-3 (File No. 333-81862) as filed with the SEC on January 31, 2002, the Form F-3 filed on May 11, 2002 (File No. 333-60712) and the Form S-8 filed on May 14, 2001 (File No. 333-13506).

10.2

Certification of Daniel Vasella, Chairman and Chief Executive Officer of Novartis AG and Raymund Breu, Chief Financial Officer of Novartis AG, pursuant to Section 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

NOVARTIS AG

By: /s/ RAYMUND BREU

Name: Raymund Breu

Title: *Chief Financial Officer, Novartis Group*

By: /s/ URS BÄRLOCHER

Name: Urs Bärlocher

Title: *Head of Legal and General Affairs,
Novartis Group*

Date: February 24, 2003

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CERTIFICATIONS

I, Daniel Vasella, certify that:

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1. I have reviewed this annual report on Form 20-F of Novartis AG;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's Board of Directors:
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: February 24, 2003

By: /s/ DANIEL VASELLA

Daniel Vasella
Principal Executive Officer

I, Raymund Breu, certify that:

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1. I have reviewed this annual report on Form 20-F of Novartis AG;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's Board of Directors:
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: February 24, 2003

By: /s/ RAYMUND BREU

Raymund Breu
Principal Financial Officer

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Report of Independent Accountants**To the Shareholders and Board of Directors
of the Novartis Group, Basel**

We have audited the consolidated financial statements (balance sheet, income statement, cash flow statement, statement of changes in equity and notes) of the Novartis Group as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002, all expressed in Swiss francs.

These consolidated financial statements are the responsibility of the Board of Directors. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We confirm that we meet the Swiss legal requirements concerning professional qualification and independence.

Our audits were conducted in accordance with auditing standards promulgated by the profession and with International Standards on Auditing issued by the International Federation of Accountants (IFAC) and auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement. We have examined on a test basis evidence supporting the amounts and disclosures in the consolidated financial statements. We have also assessed the accounting principles used, significant estimates made and the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position, of the Novartis Group as of December 31, 2002 and 2001 and the results of operations and the cash flows for each of the three years in the period ended December 31, 2002 in accordance with International Accounting Standards.

International Accounting Standards vary in certain respects from accounting principles generally accepted in the United States of America and as allowed by Item 18 to Form 20-F. The application of the latter would have affected the determination of the net income of the Group expressed in Swiss francs for each of the three years in the period ended December 31, 2002 and the determination of equity of the Novartis Group also expressed in Swiss francs at December 31, 2002 and 2001 to the extent summarized in note 31 to the consolidated financial statements. Additionally, as discussed in Notes 1 and 24 to the consolidated financial statements, Novartis changed its method of accounting for available-for-sale marketable securities and derivatives in 2001.

PricewaterhouseCoopers AG

/s/ S.A.J. BACHMANN

/s/ J.G. KAISER

S.A.J. Bachmann

J.G. Kaiser

Basel, January 21, 2003

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NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS

(for the years ended December 31, 2002, 2001 and 2000)

	Notes	2002 ⁽¹⁾	2002	2001	2000
		(\$ millions)	(CHF millions)	(CHF millions)	(CHF millions)
Sales	3/4	23,151	32,412	31,643 ⁽²⁾	35,395 ⁽²⁾
Cost of goods sold		(5,441)	(7,618)	(7,886)	(10,242)
Gross profit		17,710	24,794	23,757	25,153
Marketing & distribution		(7,848)	(10,987)	(10,703) ⁽²⁾	(10,535) ⁽²⁾
Research & development	3	(3,099)	(4,339)	(4,189)	(4,657)
Administration & general overheads		(1,129)	(1,581)	(1,588)	(2,078)
Operating income	3/4	5,634	7,887	7,277	7,883
Income from associated companies	10	(7)	(10)	139	98
Financial income, net	5	678	949	1,067	1,091
Income before taxes and minority interests		6,305	8,826	8,483	9,072
Taxes	6	(1,065)	(1,490)	(1,440)	(1,820)
Income before minority interests		5,240	7,336	7,043	7,252
Minority interests		(16)	(23)	(19)	(42)
NET INCOME		5,224	7,313	7,024	7,210
Earnings per share	7	2.08	2.91	2.73	2.75
Diluted earnings per share	7	2.03	2.84	2.72	2.75

(1) The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

(2) Restated to reflect a change in classification of certain sales incentives and discounts to retailers. 2001 Sales and marketing & distribution expenses have been reduced by CHF 395 million. 2000 Sales and marketing & distribution expenses have been reduced by CHF 410 million.

The accompanying notes form an integral part of the consolidated financial statements.

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NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEETS

(at December 31, 2002 and 2001)

	Notes	2002 ⁽¹⁾	2002	2001
		(\$ millions)	(CHF millions)	(CHF millions)
ASSETS				
Long-term assets				
Tangible fixed assets	8	6,338	8,873	9,060
Intangible assets	9	4,407	6,170	6,548
Investments in associated companies	10	6,500	9,100	6,715
Deferred taxes	11	2,184	3,057	3,235
Other financial assets	12	4,845	6,784	7,027
Total long-term assets		24,274	33,984	32,585
Current assets				
Inventories	13	2,971	4,159	4,112
Trade accounts receivable	14	3,707	5,190	5,349
Other current assets	15	1,617	2,264	2,563 ⁽²⁾
Marketable securities & financial derivatives	16	6,762	9,467	11,005 ⁽²⁾
Cash and cash equivalents		5,813	8,138	11,147
Total current assets		20,870	29,218	34,176
TOTAL ASSETS		45,144	63,202	66,761
EQUITY AND LIABILITIES				
Equity				
Share capital	17	1,008	1,412	1,443
Treasury shares	17	(125)	(175)	(169)
Reserves		27,461	38,445	40,971
Total equity		28,344	39,682	42,245
Minority interests		66	92	104
Liabilities				
Long-term liabilities				
Financial debts	18	2,736	3,831	2,500
Deferred taxes	11	2,828	3,959	3,885
Provisions and other long-term liabilities	19	2,876	4,026	3,830
Total long-term liabilities		8,440	11,816	10,215
Short-term liabilities				

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	Notes	2002 ⁽¹⁾	2002	2001
Trade accounts payable		1,270	1,778	1,809
Financial debts	20	2,849	3,988	6,177 ⁽²⁾
Other short-term liabilities	21	4,175	5,846	6,211 ⁽²⁾
Total short-term liabilities		8,294	11,612	14,197
Total liabilities		16,734	23,428	24,412
TOTAL EQUITY AND LIABILITIES		45,144	63,202	66,761

(1) The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

(2) Restated due to reclassification of the fair value of derivative financial instruments from other current assets to marketable securities & financial derivatives and from other short-term liabilities to short-term financial debts.

The accompanying notes form an integral part of the consolidated financial statements.

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NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED CASH FLOW STATEMENTS

(for the years ended December 31, 2002, 2001 and 2000)

	Notes	2002 ⁽¹⁾	2002	2001	2000
		(\$ millions)	(CHF millions)	(CHF millions)	(CHF millions)
Net income		5,224	7,313	7,024	7,210
Reversal of non-cash items					
Minority interests		16	23	19	42
Taxes		1,064	1,490	1,440	1,820
Depreciation, amortization and impairment on					
tangible fixed assets		690	966	969	1,196
Intangible assets		747	1,046	780	309
Financial assets		46	64	31	
Income from associated companies		7	10	(139)	(98)
Divestment gains		(147)	(206)	(45)	(1)
Gains on disposal of tangible and intangible assets		(289)	(405)	(465)	(56)
Net financial income		(678)	(949)	(1,067)	(1,091)
Dividends received		26	36	42	91
Interest and other financial receipts		483	676	737	1,853
Interest and other financial payments		(194)	(271)	(391)	(1,211)
Receipts from associated companies		39	55		
Taxes paid		(854)	(1,196)	(1,377)	(2,176)

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	Notes	2002 ⁽¹⁾	2002	2001	2000
Cash flow before working capital and provision changes		6,180	8,652	7,558	7,888
Restructuring payments and other cash payments out of provisions		(226)	(317)	(421)	(439)
Change in net current assets and other operating cash flow items	22	(124)	(173)	205	163
Cash flow from operating activities		5,830	8,162	7,342	7,612
Investment in tangible fixed assets		(1,186)	(1,661)	(1,351)	(1,353)
Proceeds from disposals of tangible fixed assets		204	286	275	347
Purchase of intangible assets		(99)	(139)	(978)	(2,866)
Purchase of financial assets		(2,856)	(3,998)	(6,574)	(283)
Proceeds from disposals of intangible and financial assets		885	1,239	1,550	471
Acquisition/divestment of subsidiaries	23	(605)	(847)	(169)	(1,371)
Acquisition of minorities		(2)	(3)	(1)	
Proceeds from disposals of marketable securities		7,860	11,004	8,196	12,833
Payments for acquiring marketable securities		(7,383)	(10,336)	(5,623)	(7,994)
Cash flow used for investing activities		(3,182)	(4,455)	(4,675)	(216)
Acquisition of treasury shares		(3,676)	(5,147)	(3,848)	(1,165)
Proceeds from issue of options on Novartis shares				4,056	
Increase in long-term financial debts		1,108	1,551	1,384	26
Repayment of long-term financial debts		(20)	(28)	(126)	(150)
Change in short-term financial debts		(499)	(699)	374	(1,402)
Dividends paid		(1,639)	(2,294)	(2,194)	(2,064)
Cash flow used for financing activities		(4,726)	(6,617)	(354)	(4,755)
Net effect of currency translation on cash and cash equivalents		(71)	(99)	31	(119)
Net change in cash and cash equivalents		(2,149)	(3,009)	2,344	2,522
Cash and cash equivalents at the beginning of the year		7,962	11,147	8,803	6,281
Cash and cash equivalents at end of the year		5,813	8,138	11,147	8,803

(1)

The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

The accompanying notes form an integral part of the consolidated financial statements.

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(for the years ended December 31, 2002, 2001 and 2000)

				Fair value of deferred cash flow hedges not recorded in net income	Cumulative translation differences not recorded in net income	Total reserves	Share capital	Treasury shares	Total equity
Notes	Share premium	Retained earnings	Fair value adjustments on marketable securities not recorded in net income	net income	in net income				
(in CHF millions)									
January 1, 2000	2,475	33,455			(27)	35,903	1,443	(130)	37,216
Translation effects	24a				(571)	(571)			(571)
Net income		7,210				7,210			7,210
Total components of comprehensive income		7,210			(571)	6,639			6,639
Effect of Agribusiness spin off	24b	(3,655)			(109)	(3,764)			(3,764)
Transfer of share premium	24c	(2,186)	2,186						
Dividends to third parties	24d	(2,064)				(2,064)			(2,064)
Acquisition of treasury shares		(1,156)				(1,156)		(9)	(1,165)
Total of other equity movements	(2,186)	(4,689)			(109)	(6,984)		(9)	(6,993)
December 31, 2000	289	35,976			(707)	35,558	1,443	(139)	36,862
Effect of introducing IAS 39 on January 1, 2001	24e		1,943	103		2,046			2,046
January 1, 2001	289	35,976	1,943	103	(707)	37,604	1,443	(139)	38,908
Fair value adjustments on financial instruments	24e		(889)	(123)		(1,012)			(1,012)
Associated companies' equity movements	24f	(7)				(7)			(7)
Translation effects	24a				(637)	(637)			(637)
Net income		7,024				7,024			7,024
Total components of comprehensive income		7,017	(889)	(123)	(637)	5,368			5,368
Dividends	24d	(2,194)				(2,194)			(2,194)
Acquisition of treasury shares	24g	(3,818)				(3,818)		(30)	(3,848)
Issue of call options on Novartis shares	24h	3,102				3,102			3,102
Issue of put options on Novartis shares	24i	909				909			909
		4,011	(6,012)			(2,001)		(30)	(2,031)

	Notes	Share premium	Retained earnings	Fair value adjustments on marketable securities not recorded in net income	Fair value of deferred cash flow hedges not recorded in net income	Cumulative translation differences not recorded in net income	Total reserves	Share capital	Treasury shares	Total equity
Total of other equity movements										
December 31, 2001		4,300	36,981	1,054	(20)	(1,344)	40,971	1,443	(169)	42,245
Fair value adjustments on financial instruments	24e		138	(1,467)	201		(1,128)			(1,128)
Associated companies' equity movements	24f		(111)			(35)	(146)			(146)
Recycled goodwill	24j		41				41			41
Translation effects						(1,501)	(1,501)			(1,501)
Net income			7,313				7,313			7,313
Total of components of comprehensive income			7,381	(1,467)	201	(1,536)	4,579			4,579
Dividends	24d		(2,294)				(2,294)			(2,294)
Acquisition of treasury shares	24g		(4,811)				(4,811)		(37)	(4,848)
Reduction in share capital	24k							(31)	31	
Total of other equity movements			(7,105)				(7,105)	(31)	(6)	(7,142)
December 31, 2002		4,300	37,257	(413)	181	(2,880)	38,445	1,412	(175)	39,682

The accompanying notes form an integral part of the consolidated financial statements.

NOTES TO THE NOVARTIS GROUP

CONSOLIDATED FINANCIAL STATEMENTS

1. Accounting policies

The Novartis Group ("Group" or "Novartis") consolidated financial statements are prepared in accordance with the historical cost convention and comply with the standards formulated by the International Accounting Standards Board (IASB) and its predecessor organization the International Accounting Standards Committee (IASC) and the following significant accounting policies.

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual outcomes could differ from those estimates.

Changes in accounting principles

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The Group adopted IAS 39 "*Financial Instruments: Recognition and Measurement*" from January 1, 2001. This involved the recording in the balance sheet of the unrealized gains on the available-for-sale marketable securities and derivatives portfolios.

Scope of consolidation

The financial statements include all companies which Novartis AG, Basel, directly or indirectly controls (generally over 50% of voting interest).

Special purpose entities, irrespective of their legal structure, are consolidated in instances where the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. As permitted by IAS, equity compensation and post-employment plans are not consolidated.

Investments in associated companies, (generally investments of between 20% and 50% in a company's voting shares) and joint ventures are accounted for by using the equity method with the Group recording its share of the associated company's net income and equity.

Principles of consolidation

The annual closing date of the individual financial statements is December 31. The financial statements of consolidated companies operating in highly inflationary economies are adjusted to eliminate the impact of high inflation.

The purchase method of accounting is used for acquired businesses. Companies acquired or disposed of during the year are included in the consolidated financial statements from the date of acquisition or up to the date of disposal.

The Group was formed on December 20, 1996 when all assets and liabilities of Sandoz AG and Ciba-Geigy AG were transferred by universal succession to Novartis AG. The uniting of interests method was used for this transaction. The merger was consummated before the effective date of Interpretation 9 of the Standards Interpretation Committee on accounting for business combinations; if it were undertaken today, the merger might require a different accounting treatment.

Significant intercompany income and expenses, including unrealized gross profits from internal Novartis transactions, and intercompany receivables and payables have been eliminated.

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Revenue and expense recognition

Sales are recognized when the significant risks and rewards of ownership of the assets have been transferred to a third party and are reported net of sales taxes and rebates. Provisions for rebates to customers are recognized in the same period that the related sales are recorded, based on the contract terms. Expenses of research and service contracts in progress are recognized based on their percentage of completion. Sales have been restated for all periods presented to treat certain sales incentives and discounts to retailers as sales deductions instead of marketing and distribution expenses.

Foreign currencies

The consolidated financial statements of Novartis are expressed in Swiss francs ("CHF" or "Swiss francs"). The local currency has primarily been used as the reporting currency throughout the world.

In the respective entity financial statements, monetary assets and liabilities denominated in foreign currencies are translated at the rate prevailing at the balance sheet date. Transactions are recorded using the approximate exchange rate at the time of the transaction. All resulting foreign exchange transaction gains and losses are recognized in the subsidiary's income statement.

Income, expense and cash flows of the consolidated companies have been translated into Swiss francs using average exchange rates. The balance sheets are translated using the year end exchange rates. Translation differences arising from movements in the exchange rates used to translate equity and long-term internal financing and net income are allocated to reserves.

Derivative financial instruments and hedges

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The Group adopted IAS 39 "*Financial Instruments: Recognition and Measurement*" from January 1, 2001. Under IAS 39 derivative financial instruments are initially recognized in the balance sheet at cost and subsequently remeasured to their fair value. The method of recognizing the resulting gain or loss is dependent on whether the derivative contract is designed to hedge a specific risk and qualifies for hedge accounting. On the date a derivative contract is entered into, the Group designates derivatives which qualify as hedges for accounting purposes as either a) a hedge of the fair value of a recognized asset or liability (fair value hedge), or b) a hedge of a forecasted transaction or firm commitment (cash flow hedge) or c) a hedge of a net investment in a foreign entity.

Changes in the fair value of derivatives which are fair value hedges and that are highly effective are recognized in the income statement, along with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk. Changes in the fair value of derivatives in cash flow hedges are recognized in equity. Where the forecasted transaction or firm commitment results in the recognition of an asset or liability, the gains and losses previously included in equity are included in the initial measurement of the asset or liability. Otherwise, amounts recorded in equity are transferred to the income statement and classified as revenue or expense in the same period in which the forecasted transaction affects the income statement.

Hedges of net investments in foreign entities are accounted for similarly to cash flow hedges. The Group hedges certain net investments in foreign entities with foreign currency borrowings. All foreign exchange gains and losses arising on translation are recognized in equity and included in cumulative translation differences.

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Certain derivative instruments, while providing effective economic hedges under the Group's policies, do not qualify for hedge accounting. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognized immediately in the income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognized in the income statement when the committed or forecasted transaction is ultimately recognized in the income statement. However, if a forecasted or committed transaction is no longer expected to occur, the cumulative gain or loss that was recognized in equity is immediately transferred to the income statement.

The purpose of hedge accounting is to match the impact of the hedged item and the hedging instrument in the income statement. To qualify for hedge accounting, the hedging relationship must meet several strict conditions with respect to documentation, probability of occurrence, hedge effectiveness and reliability of measurement. At the inception of the transaction the Group documents the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives designated as hedges to specific assets and liabilities or to specific firm commitments or forecasted transactions. The Group also documents its assessment, both at the hedge inception and on an ongoing basis, as to whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Up to January 1, 2001 the Group's policy on accounting for derivative instruments not considered to be hedges was to value these at the lower of cost on inception and fair value on a portfolio basis. A net unrealized loss was included in the current year's result. A net unrealized gain was not recorded. The Group's policy on accounting for derivative financial instruments considered to be hedges was very similar to IAS 39 requirements although the conditions for hedge effectiveness were less strict.

Tangible fixed assets

Tangible fixed assets have been valued at cost of acquisition or production cost and depreciated on a straight-line basis to the income statement, over the following estimated useful lives:

Buildings	20 to 40 years
Machinery and equipment	10 to 20 years
Furniture and vehicles	5 to 10 years
Computer hardware	3 to 7 years

Land is valued at acquisition cost, except if held under long-term lease arrangements, when it is amortized over the life of the lease. Land held under long-term lease agreements relates to upfront payments to lease land on which certain of the Group's buildings are located. Additional costs which extend the useful life of the tangible fixed assets are capitalized. Financing costs associated with the construction of tangible fixed assets are not capitalized. Tangible fixed assets which are financed by leases giving rights to use the assets as if owned are capitalized at their estimated cost at the inception of the lease, and depreciated in the same manner as other tangible fixed assets over the shorter of the lease term or their useful life.

Long-lived assets, including identifiable intangibles and goodwill, are reviewed for impairment whenever events or changes in circumstances indicate that the balance sheet carrying amount of the asset

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may not be recoverable. When such events or changes in circumstances indicate the asset may not be recoverable, the Group estimates its value in use based on the future cash flows expected to result from the use of the asset and its eventual disposition. If the balance sheet carrying amount of the asset is more than the higher of its value in use to Novartis or its net selling price, an impairment loss for the difference is recognized. For purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Considerable management judgment is necessary to estimate discounted future cash flows. Accordingly, actual outcomes could vary significantly from such estimates.

Intangible assets

These are valued at their cost and reviewed periodically and adjusted for any diminution in value as noted in the preceding paragraph. Any resulting impairment loss is recorded in the income statement in general overheads. In the case of business combinations, the excess of the purchase price over the fair value of net identifiable assets acquired is recorded as goodwill in the balance sheet. Goodwill, which is denominated in the local currency of the related acquisition, is amortized to income through administration and general overheads on a straight-line basis over its useful life. The amortization period is determined at the time of the acquisition, based upon the particular circumstances, and ranges from 5 to 20 years. Goodwill relating to acquisitions arising prior to January 1, 1995 has been fully written off against reserves.

Management determines the estimated useful life of goodwill based on its evaluation of the respective company at the time of the acquisition, considering factors such as existing market share, potential sales growth and other factors inherent in the acquired company.

Other acquired intangible assets are written off on a straight-line basis over the following periods:

Trademarks	10 to 15 years
Product and marketing rights	5 to 20 years
Software	3 years
Others	3 to 5 years

Trademarks are amortized on a straight-line basis over their estimated economic or legal life, whichever is shorter, while the history of the Group has been to amortize product rights over estimated useful lives of 5 to 20 years. The useful lives assigned to acquired product rights are based on the maturity of the products and the estimated economic benefit that such product rights can provide. Marketing rights are amortized over their useful lives commencing in the year in which the rights first generate sales.

Financial assets

Associated companies and joint ventures are accounted for by the equity method. Since January 1, 2001 all other minority investments and loans are initially recorded at cost and subsequently carried at fair value. Exchange rate gains and losses on loans are recorded in the income statement. All other changes in the fair value of financial assets are deferred as a fair value adjustment in equity and recycled to the income statement when the asset is sold. Adjustments are made for other than temporary impairments in value.

Under the Group's accounting policy up to January 1, 2001, all minority investments were carried at their acquisition cost adjusted for impairments and loans at their nominal value.

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Inventories

Purchased products are valued at acquisition cost while own-manufactured products are valued at manufacturing costs including related production expenses. In the balance sheet inventory is primarily valued at standard cost, which approximates to historical cost determined on a first-in first-out basis, and this value is used for the cost of goods sold in the income statement. Provisions are made for inventories with a lower market value or which are slow-moving. Unsaleable inventory is fully written off.

Trade accounts receivable

The reported values represent the invoiced amounts, less adjustments for doubtful receivables.

Cash and cash equivalents

Cash and cash equivalents include highly liquid investments with original maturities of three months or less. This position is readily convertible to known amounts of cash.

Marketable securities

Marketable securities consist of equity and debt securities which are traded in liquid markets. The Group has classified all its marketable securities as available-for-sale, as they are not acquired to generate profit from short-term fluctuations in price. All purchases and sales of marketable securities are recognized on the trade date, which is the date that the Group commits to purchase or sell the asset. Since the adoption of IAS 39 from January 1, 2001, marketable securities are initially recorded at cost and subsequently carried at fair value. Exchange rate gains and losses on the bonds are recorded in the income statement. All other changes in the fair value of unhedged securities are deferred as a fair value adjustment in equity and recycled to the income statement when the asset is sold or impaired. The change in fair value of effectively hedged securities is recorded in the income statement where it offsets the gains and losses of the hedging derivative.

Unrealized losses on marketable securities are included in financial income, net in the income statement when there is objective evidence that the marketable securities are impaired. The Group's policy is to recognize impairments on available-for sale securities when their fair value is 50% less than cost for a sustained period of 6 months.

Under the Group's accounting policy up to January 1, 2001, marketable securities were carried at the lower of cost or market and unrealized losses were included as financial income, net in the income statement.

Repurchase agreements

The underlying securities are included within marketable securities. The repurchase agreements for the securities sold and agreed to be repurchased under the agreement, are recognized gross and included in cash and cash equivalents and short-term financial debts. Income and expenses are recorded in interest income and expense, respectively.

Taxes

Taxes on income are accrued in the same periods as the revenues and expenses to which they relate. Deferred taxes have been calculated using the comprehensive liability method. They are calculated on the

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temporary differences that arise between the tax base of an asset or liability and its carrying value in the balance sheet of Group companies prepared for consolidation purposes, except for those differences related to investments in subsidiaries where their reversal will not take place in the foreseeable future. Furthermore, withholding or other taxes on eventual distribution of retained earnings of Group companies are only taken into account where a dividend has been planned since generally, the retained earnings are reinvested.

Deferred tax assets or liabilities, calculated using applicable subsidiary tax rates, are included in the consolidated balance sheet as either a long-term asset or liability, with changes in the year recorded in the income statement. Deferred tax assets are fully recognized and reduced by a valuation allowance only if it is probable that a benefit will not be realized in the future.

Pension fund, post-employment benefits, other long-term employee benefits and employee share participation plans

(a) Defined benefit pension plans

The liability in respect of defined benefit pension plans is in all material cases the defined benefit obligation calculated annually by independent actuaries using the projected unit credit method. The defined benefit obligation is measured at the present value of the estimated future cash flows. The charge for such pension plans, representing the net periodic pension cost less employee contributions, is included in the personnel expenses of the various functions where the employees are located. Plan assets are recorded at their fair values. Significant gains or

losses arising from experience adjustments, changes in actuarial assumptions, and amendments to pension plans are charged or credited to income over the service lives of the related employees.

(b) Post-employment benefits other than pensions

Certain subsidiaries provide healthcare and insurance benefits for a portion of their retired employees and their eligible dependents. The cost of these benefits is actuarially determined and included in the related function expenses over the employees' working lives. The related liability is included in long-term liabilities.

(c) Other long-term employee benefits

Other long-term employee benefits represent amounts due to employees under deferred compensation arrangements mandated by certain jurisdictions in which the Group conducts its operations. Benefits cost is recognized on an accrual basis in the personnel expenses of the various functions where the employees are located. The related obligation is accrued in other long-term liabilities.

(d) Employee share participation plans

No compensation cost is recognized in these financial statements for options or shares granted to employees from employee share participation plans.

Research and development

Research and development expenses are fully charged to the income statement. The Group considers that the regulatory and other uncertainties inherent in the development of its key new products preclude it

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from capitalizing development costs. Acquired projects which have achieved technical feasibility, usually signified by US Food & Drug Administration or comparable regulatory body approval, are capitalized because it is probable that the costs will give rise to future economic benefits. Laboratory buildings and equipment included in tangible fixed assets are depreciated over their estimated useful lives.

Government grants

Government grants are deferred and recognized in the income statement over the period necessary to match them with the related costs which they are intended to compensate for.

Restructuring charges

Restructuring charges are accrued against operating income in the period in which management has committed to a plan and it is probable a liability has been incurred and the amount can be reasonably estimated. Restructuring charges or releases are included in general overheads. Releases of accrued amounts are recognized in the period in which it is decided that the amounts will not be required.

Environmental liabilities

Novartis is exposed to environmental liabilities relating to its past operations, principally in respect of remediation costs. Provisions for non-recurring remediation costs are made when expenditure on remedial work is probable and the cost can be estimated. Cost of future expenditures do not reflect any claims or recoveries. The Group records recoveries at such time the amount is reasonably estimable and collection is probable. With regard to recurring remediation costs, the discounted amount of such annual costs for the next 30 years are calculated and recorded in long-term liabilities.

Dividends

Dividends are recorded in the Group's financial statements in the period in which they are approved by the Group's shareholders.

Treasury shares and share split

Treasury shares are deducted from equity at their nominal value of CHF 0.50 per share. Prior to the share split, which became effective on May 7, 2001, the nominal value was CHF 20.00 per share. Differences between this amount and the amount paid for acquiring, or received for disposing of, treasury shares are recorded in consolidated equity. Except where indicated, all share related data has been restated to reflect the effect of the share split.

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2. Changes in the scope of consolidation

The following significant changes were made during 2002, 2001 and 2000:

Acquisitions: 2002

Generics

On November 29, 2002 the business unit acquired 99% of Lek d.d., Ljubljana, Slovenia for CHF 1.3 billion in cash. Lek is an international group of generics companies and ranks among the leading pharmaceuticals businesses in the Eastern European region, while having a broader international presence in several specific product lines. Lek manages a wide-ranging business portfolio, with substantial expertise in anti-infectives, cardiovascular and gastrointestinal tract products. The Lek Group employs about 3 900 people in various regions and achieved total sales of CHF 544 million, operating income of CHF 67 million and net income of CHF 57 million in 2001. The acquisition was accounted for under the purchase method of accounting. A provisional balance sheet at December 31, 2002 has been consolidated, however, due to its immateriality, no post-acquisition income statement or cash flow has been consolidated. The balance sheet may be subject to revision once the final accounting for this transaction has been determined during 2003. An initial assessment of goodwill was CHF 795 million which is being amortized on a straight-line basis over 20 years.

Animal Health

In January 2002, the business unit completed the acquisition of two US farm animal vaccine companies, Grand Laboratories Inc., Iowa and ImmTech Biologies Inc., Kansas. The combined 2001 revenues were approximately CHF 55 million and the combined purchase price is a minimum of CHF 168 million of which CHF 133 million was settled in Novartis American Depositary Shares. The final price may increase depending on whether certain future sales and other targets are met. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 142 million which is being amortized on a straight-line basis over 15 years.

Corporate

During 2002 the Group increased its investment in Roche Holding AG by CHF 2.9 billion by acquiring a further 11.4% of this company's voting shares. At December 31, 2002, Novartis owns 32.7% of the voting shares which represents approximately 6.2% of Roche Holding AG's total shares and equity securities.

Acquisitions: 2001

Generics

In January 2001, the business unit acquired 100% of the generic business line in the USA of Apothecon Inc., the generic arm of Bristol-Myers Squibb, for CHF 66 million in cash. No financial debts were acquired. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 51 million which is being amortized on a straight-line basis over 15 years.

In January 2001, the business unit acquired 100% of the generic business in six European countries from BASF AG, Germany for CHF 119 million in cash and the assumption of CHF 53 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 121 million which is being amortized on a straight-line basis over 20 years.

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In April 2001, the business unit acquired 100% of Labinca SA, Buenos Aires, Argentina for CHF 118 million in cash and the assumption of CHF 14 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 95 million which is being amortized on a straight-line basis over 20 years.

In April 2001, the business unit acquired 100% of Lagap Pharmaceuticals Ltd., UK, from Adcock Ingram Ltd for CHF 32 million in cash and the assumption of CHF 33 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 53 million which is being amortized on a straight-line basis over 20 years.

Corporate

During 2001, the Group acquired 21.3% of the voting shares of Roche Holding AG for CHF 5.2 billion. This represents approximately 4% of the total shares and equity securities of Roche Holding AG and is accounted for using the equity method of accounting. The related goodwill was CHF 1,246 million which is being amortized on a straight-line basis over 20 years.

Acquisitions: 2000

Generics

On April 10, 2000, the business unit acquired 72% of Grandis Biotech GmbH, Freiburg, Germany for CHF 26 million in cash. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 32 million, which is being amortized on a straight-line basis over 15 years.

CIBA Vision

On October 2, 2000 the business unit acquired 100% of Wesley Jessen VisionCare Inc., Des Plaines, Illinois, USA for CHF 1.3 billion (USD 0.8 billion) in cash.

The net assets acquired consisted of tangible fixed assets (CHF 177 million), inventories (CHF 182 million), trade accounts receivable (CHF 93 million), deferred tax assets (CHF 56 million), other assets (CHF 118 million); deferred tax liabilities (CHF 241 million), short term financial debts (CHF 155 million) and other liabilities (CHF 330 million). The acquisition was accounted for under the purchase method of accounting and the related goodwill and intangible assets were CHF 1.4 billion which are being amortized on a straight-line basis over 20 years.

Animal Health

In January 2000, the business unit completed the 100% acquisition of Vericore Ltd., a UK-based company focused on vaccines, parasiticides and other products for farm animals, pharmaceuticals for companion animals, and aquaculture. The acquisition price amounted to CHF 96 million and was paid in cash.

In June 2000, the business unit increased the 40% stake in the Canadian-based aquaculture company Cobequid Life Sciences Inc., which had been obtained in the Vericore acquisition, to 100% for CHF 38 million in cash.

These acquisitions were accounted for under the purchase method of accounting and the related goodwill was CHF 163 million which is being amortized on a straight-line basis over 15 years.

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Divestments: 2002

Consumer Health Division

On November 29, 2002 the division divested its Food & Beverage (F&B) business to Associated British Foods plc (ABF), London, Great Britain, for a total CHF 402 million in cash. ABF acquired the F&B business and brand ownership worldwide (including the brands Ovaltine/Ovomaltine, Caotina and Lacovo) with the exception of the USA and Puerto Rico. The 2002 sales and operating income recorded by Novartis up to the November 29, 2002 divestment date amounted to CHF 325 million and CHF 11 million, respectively. This transaction produced a divestment gain of CHF 205 million which was recorded as a reduction to administration and general overheads.

Divestments: 2001

There were no significant divestments during 2001.

Divestments: 2000

Agribusiness division

On December 1, 1999 the Board of Novartis approved the divestment of the Agribusiness division by merging it with the Agrochemicals business of AstraZeneca Plc.

Novartis spun-off its Agribusiness division on November 6, 2000 to its shareholders as part of the transactions necessary to form Syngenta AG. On the same day AstraZeneca Plc. also spun-off its Crop Protection activities which were then merged with Novartis Agribusiness. On spin-off, Novartis AG shareholders owned 61% of the new company and AstraZeneca shareholders 39%. Syngenta AG was listed on the Swiss, New York, London and Stockholm exchanges on November 13, 2000.

The sales and operating income recorded by Novartis Agribusiness up to the spin-off date were CHF 6.7 billion and CHF 1.2 billion, respectively. This transaction involved the Group transferring CHF 3.3 billion of debt to Syngenta. The Group's equity has been reduced by a net CHF 3.8 billion (after taking into account a receipt from Novartis shareholders of CHF 687 million in connection with this transaction) due to this spin-off to its shareholders. Novartis incurred costs in relation to this transaction of CHF 69 million.

3. Division and business unit breakdown of key figures 2002, 2001 and 2000

Operating Divisions

Novartis is divided operationally on a worldwide basis into two divisions, Pharmaceuticals and Consumer Health. These divisions, which are based on internal management structures, are as follows:

The Pharmaceuticals division researches, develops, manufactures, distributes, and sells branded pharmaceuticals in the following therapeutic areas: cardiovascular, metabolism and endocrinology; central nervous system; dermatology; oncology and hematology; ophthalmics; respiratory; rheumatology; bone and hormone replacement therapy and transplantation. The Pharmaceuticals division is organized into five business units: Primary Care, Oncology, Transplantation, Mature Products and Ophthalmics, which due to the fact that they have common long-term economic perspectives, customers, research, development, production, distribution and regulatory environments are not required to be separately disclosed as segments.

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The Consumer Health division consists of the following six business units:

The Generics business unit manufactures, distributes and sells off-patent pharmaceutical products and substances.

The Over-The-Counter (OTC) business unit manufactures, distributes and sells a variety of over-the-counter medicines.

The Animal Health business unit manufactures, distributes and sells veterinary products for farm and companion animals.

The Medical Nutrition business unit manufactures, distributes and sells health and medical nutrition products.

The Infant & Baby business unit manufactures, distributes and sells foods and other products and services designed to serve the particular needs of infants and babies.

The CIBA Vision business unit manufactures, distributes and sells contact lenses, lens care products, and ophthalmic surgical products.

The current business unit structure of the Consumer Health division was introduced during 2002 to reflect management and organizational changes. 2001 and 2000 figures and presentation have been restated.

Corporate

This includes the costs of the Group headquarters and those of corporate coordination functions in major countries. In addition, Corporate includes certain items of income and expense which are not directly attributable to specific divisions. Usually, no allocation of Corporate items is made to the divisions although there are charges made by Corporate for share and share option programs and certain pension plans.

The Group's divisions are businesses that offer different products. These divisions are managed separately because they manufacture, distribute, and sell distinct products which require differing technologies and marketing strategies.

Revenues on inter-divisional and inter-business unit sales are determined on an arm's length basis. The accounting policies of the divisions and business units described above are the same as those described in the summary of accounting policies except that they receive a Corporate charge for share and share option programs which have no net cost in the Group's IAS consolidated financial statements. The Group principally evaluates divisional and business unit performance and allocates resources based on operating income.

Division and business unit net operating assets consist primarily of tangible fixed assets, intangible assets, inventories and receivables less operating liabilities. Corporate assets and liabilities principally consist of net liquidity (cash, cash equivalents, marketable securities less financial debts), investments in associated companies and deferred and current taxes.

Discontinued division

The Agribusiness division principally manufactured, distributed and sold insecticides, herbicides and fungicides and sold seeds for growing corn, sugarbeet, oilseeds, vegetables and flowers.

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Consumer Health Business Units												
	Pharmaceuticals Division	Consumer Health Division	Generics	OTC	Animal Health	Medical Nutrition (incl. Nutrition & Santé)	Infant & Baby	CIBA Vision	Divested Health & Functional Food activities	Consumer Health Division eliminations	Corporate	Total
2002												
(in CHF millions except employees)												
Sales to third parties	21,002	11,410	2,809	2,359	971	1,109	2,075	1,762	325			32,412
Sales to other division/business units	173	160	202	19		13		13		(87)	(333)	
Sales of divisions/business units	21,175	11,570	3,011	2,378	971	1,122	2,075	1,775	325	(87)	(333)	32,412
Operating income	6,022	1,684	406	374	144	6	355	183	216		181	7,887
Income from associated companies	168	2	2								(180)	(10)
Financial income, net												949
Income before taxes and minority interests												8,826
Taxes												(1,490)
Income before minority interests												7,336

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Consumer Health Business Units

Minority interests

(23)

Net income **7,313**

Included in operating income are:

Research and development	(3,580)	(587)	(215)	(104)	(94)	(25)	(36)	(109)	(4)	(172)	(4,339)
Depreciation of tangible fixed assets	(546)	(346)	(129)	(32)	(13)	(32)	(38)	(102)		(29)	(921)
Amortization of intangible assets	(286)	(256)	(78)	(18)	(25)	(9)	(39)	(87)		(9)	(551)
Impairment charges on tangible and intangible assets	(434)	(97)	(21)	(1)			(41)	(6)	(28)	(9)	(540)
Restructuring charges		(84)		(14)		(40)			(30)		(84)
Divestment gain	1	205							205		206

Total assets	16,763	11,818	4,673	1,266	846	541	2,274	2,283		(65)	34,621	63,202
Liabilities	(5,476)	(3,685)	(1,097)	(465)	(195)	(342)	(1,222)	(429)		65	(14,267)	(23,428)

Total equity and minority interests	11,287	8,133	3,576	801	651	199	1,052	1,854			20,354	39,774
Less net liquidity											(9,786)	(9,786)

Net operating assets	11,287	8,133	3,576	801	651	199	1,052	1,854			10,568	29,988
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Included in total assets are:

Total tangible fixed assets	5,593	2,634	1,389	237	100	131	327	450		646	8,873
Additions to tangible fixed assets	785	561	332	37	16	45	68	63		315	1,661
Additions in intangible assets	3	1,039	831	39	162			7		29	1,071
Total investments in associated companies	1,404	25	25							7,671	9,100

Employees at year end	44,110	27,552	7,932	3,797	2,218	2,701	4,901	6,003			1,215	72,877
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Consumer Health Business Units

	Pharmaceuticals Division	Consumer Health Division	Generics	OTC	Animal Health	Medical Nutrition (incl. & Santé)	Infant & Baby	CIBA Vision	Divested Health & Functional Food activities	Consumer Health Division eliminations	Corporate	Total
2001												

(in CHF millions except employees)

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Consumer Health Business Units

Sales to third parties	20,181	11,462	2,433	2,538	962	1,115	2,227	1,787	400		31,643
Sales to other division/business units	230	174	203	24	15	5		17		(90)	(404)
Sales of divisions/business units	20,411	11,636	2,636	2,562	977	1,120	2,227	1,804	400	(90)	(404) 31,643
Operating income	5,677	1,513	281	452	138	87	388	174	(7)		87 7,277
Income from associated companies	190	(12)	2			(14)				(39)	139
Financial income, net											1,067
Income before taxes and minority interests											8,483
Taxes											(1,440)
Income before minority interests											7,043
Minority interests											(19)
Net income											7,024
Included in operating income are:											
Research and development	(3,447)	(541)	(169)	(104)	(93)	(33)	(40)	(98)	(4)	(201)	(4,189)
Depreciation of tangible fixed assets	(578)	(341)	(126)	(33)	(14)	(31)	(41)	(96)		(20)	(939)
Amortization of intangible assets	(306)	(249)	(87)	(18)	(15)	(8)	(19)	(102)		(9)	(564)
Impairment charges on tangible and intangible assets	(242)	(4)		(2)		(1)	(1)				(246)
Restructuring charges		(21)				(21)					(21)
Divestment gain										45	45
Total assets	18,631	11,662	3,362	1,386	735	612	2,483	2,909	205	(30)	36,468 66,761
Liabilities	(5,487)	(3,630)	(740)	(518)	(163)	(204)	(1,342)	(599)	(94)	30	(15,295) (24,412)
Total equity and minority interests	13,144	8,032	2,622	868	572	408	1,141	2,310	111		21,173 42,349
Less net liquidity											(13,475) (13,475)
Net operating assets	13,144	8,032	2,622	868	572	408	1,141	2,310	111		7,698 28,874
Included in total assets are:											
Total tangible fixed assets	5,897	2,626	1,081	264	73	141	386	579	102	537	9,060
	617	510	209	22	19	17	84	153	6	224	1,351

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Consumer Health Business Units

Additions to tangible fixed assets											
Additions in intangible assets	177	494	420	7	2	5	21	39		25	696
Total investments in associated companies	1,554	7	7							5,154	6,715

Employees at year end	41,256	28,848	7,230	3,613	1,997	2,910	5,261	6,797	1,040	1,012	71,116
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Consumer Health Business Units

2000	Pharmaceuticals Division	Consumer Health Division	Generics	OTC	Animal Health	Medical Nutrition (incl. Nutrition & Santé)	Infant & Baby	CIBA Vision	Divested Health & Functional Food activities	Consumer Health Division eliminations	Corporate	Total Continuing Activities	Discontinued Agribusiness division
(in CHF millions except employees)													

Sales to third parties	18,150	10,552	1,973	2,483	1,083	1,136	2,108	1,392	377			28,702	6,715
Sales to other division/business units	245	147	170	28		14		8		(73)	(392)		

Sales of divisions/business units	18,395	10,699	2,143	2,511	1,083	1,150	2,108	1,400	377	(73)	(392)	28,702	6,715
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Operating income	5,401	1,390	242	424	179	66	371	100	8		(64)	6,727	1,012
Income from associated companies	104	(7)	1			(7)		(1)				97	
Financial income, net												1,216	(1,504)

Income before taxes and minority interests												8,040	1,012
Taxes												(1,504)	(1,504)

Income before minority interests												6,536	958
Minority interests												(25)	

Net income												6,511	958
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Included in operating income are:

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Consumer Health Business Units

Research and development	(3,311)	(511)	(170)	(107)	(88)	(31)	(42)	(67)	(6)	(189)	(4,011)	(
Depreciation of tangible fixed assets	(622)	(314)	(115)	(32)	(12)	(30)	(39)	(86)		(32)	(968)	(
Amortization of intangible assets	(62)	(140)	(58)	(1)	(12)	(14)	(23)	(32)		(3)	(205)	(
Impairment charges on tangible and intangible assets	(2)										(2)	
Restructuring charges	(42)	(59)	(16)	(2)			(41)				(101)	
Divestment gain	1										1	
Total assets	16,887	10,952	2,575	1,308	842	660	2,246	3,169	212	(60)	30,357	58,196
Liabilities	(4,477)	(3,740)	(636)	(533)	(198)	(236)	(1,283)	(824)	(90)	60	(13,039)	(21,256)
Total equity and minority interests	12,410	7,212	1,939	775	644	424	963	2,345	122		17,318	36,940
Less net liquidity											(14,595)	(14,595)
Net operating assets	12,410	7,212	1,939	775	644	424	963	2,345	122		2,723	22,345
Included in total assets are:												
Total tangible fixed assets	5,770	2,574	974	272	72	150	350	648	108		686	9,030
Additions to tangible fixed assets	534	503	241	36	20	18	61	120	7		142	1,179
Additions in intangible assets	2,731	1,683	58	14	182	12	20	1,397			35	4,449
Total investments in associated companies	1,375	12	5			2		5			144	1,531
Employees at year end	38,397	28,280	5,712	3,353	1,975	2,968	5,562	7,644	1,066		976	67,653

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4. Regional breakdown of key figures 2002, 2001 and 2000

2002	Europe	The Americas	Asia/Africa/Australia	Total
(in CHF millions except employees)				
Sales⁽¹⁾	10,602	16,407	5,403	32,412

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2002	Europe	The Americas	Asia/Africa/Australia	Total
Operating income⁽²⁾	5,927	1,483	477	7,887
Depreciation of tangible fixed assets included in operating income	553	308	60	921
Net operating assets⁽³⁾⁽⁴⁾	19,776	8,858	1,354	29,988
Additions to tangible fixed assets included in net operating assets	774	836	51	1,661
Additions to intangible assets	839	212	20	1,071
Personnel costs	3,544	3,744	683	7,971
Employees at year end	32,595	28,328	11,954	72,877
2001	Europe	The Americas	Asia/Africa/Australia	Total

(in CHF millions except employees)

Sales⁽¹⁾⁽⁵⁾	10,107	16,303	5,233	31,643
Operating income⁽²⁾	4,473	2,240	564	7,277
Depreciation of tangible fixed assets included in operating income	561	311	67	939
Net operating assets⁽³⁾⁽⁴⁾	17,071	10,216	1,587	28,874
Additions to tangible fixed assets included in net operating assets	560	723	68	1,351
Additions to intangible assets	241	442	13	696
Personnel costs	3,127	3,527	704	7,358
Employees at year end	31,386	27,303	12,427	71,116

2000	Europe	The Americas	Asia/Africa/Australia	Total
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(in CHF millions except employees)

Sales⁽¹⁾⁽⁵⁾	11,686	17,400	6,309	35,395
Operating income⁽²⁾	4,377	2,570	936	7,883
Depreciation of tangible fixed assets included in operating income	715	388	86	1,189
Net operating assets⁽³⁾⁽⁴⁾	11,574	9,400	1,372	22,346
Additions to tangible fixed assets included in net operating assets	790	475	88	1,353
Additions to intangible assets	610	3,837	2	4,449
Personnel costs	3,703	3,282	828	7,813
Employees at year end	28,815	27,063	11,775	67,653

(1) Sales by location of third party customer.

(2) Operating income as recorded in the legal entities in the respective region.

(3) Long-term and current assets (excluding marketable securities, cash and time deposits) less non-interest bearing liabilities.

(4) Restated due to reclassification of the fair value of derivative financial instruments from other current assets to marketable securities & financial derivatives and from other short-term liabilities to short-term financial debts.

(5) Restated due to change in classification of certain sales incentives and discounts to retailers from marketing and distribution expenses to Sales.

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The following countries accounted for more than 5% of the respective Group totals as at, or for the years ended, December 31, 2002, 2001 and 2000:

Country	Sales ⁽¹⁾⁽⁴⁾						Investment in tangible fixed assets						Net operating assets ⁽²⁾⁽³⁾					
	2002	%	2001	%	2000	%	2002	%	2001	%	2000	%	2002	%	2001	%	2000	%
(in CHF millions)																		
Switzerland	492	2	499	2	624	2	193	12	160	12	270	20	12,967	43	10,548	37	3,782	17
USA	13,833	43	13,486	43	13,518	38	794	48	655	49	389	29	8,501	28	9,228	32	8,540	38
Japan	2,631	8	2,560	8	2,891	8	8	0	14	1	17	1	866	3	990	3	891	4
Germany	1,905	6	1,977	6	2,207	6	70	4	54	4	110	8	243	1	196	1	292	1
France	1,705	5	1,596	5	1,992	6	28	2	79	6	90	7	903	3	928	3	436	2
UK	1,055	3	1,054	3	1,169	3	123	7	60	4	94	7	1,211	4	1,415	5	1,434	6
Austria	278	1	267	1	276	1	203	12	107	8	94	7	861	3	805	3	604	3
Other	10,513	32	10,204	32	12,718	36	242	15	222	16	289	21	4,436	15	4,764	16	6,367	29
Total Group	32,412	100	31,643	100	35,395	100	1,661	100	1,351	100	1,353	100	29,988	100	28,874	100	22,346	100

(1) Sales by location of third party customer.

(2) Long-term and current assets (excluding marketable securities, cash and time deposits) less non-interest bearing liabilities.

(3) Figures for 2001 and 2000 have been restated due to reclassification of the fair value of derivative financial instruments from other current assets to marketable securities & financial derivatives and from other short-term liabilities to short-term financial debts.

(4) Figures for 2001 and 2000 have been restated due to change in classification of certain sales incentives and discounts to retailers from marketing and distribution expenses to Sales.

No single customer accounts for 10% or more of the Group's total sales.

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5. Financial income, net

	2002	2001	2000
	(CHF millions)	(CHF millions)	(CHF millions)
Interest income	647	639	1,052
Dividend income	106	42	91
Capital gains		1,143	784
Income on options and forward contracts	2,575	1,588	804
Other financial income	4		5
Financial income	3,332	3,412	2,736
Interest expense	(301)	(367)	(510)
Capital losses	(123)		
Expenses on options and forward contracts	(1,958)	(1,713)	(1,334)

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	2002	2001	2000
	<u> </u>	<u> </u>	<u> </u>
Other financial expense	(107)	(147)	(130)
	<u> </u>	<u> </u>	<u> </u>
Financial expense	(2,489)	(2,227)	(1,974)
	<u> </u>	<u> </u>	<u> </u>
Currency result, net	106	(118)	329
	<u> </u>	<u> </u>	<u> </u>
Total financial income, net	949	1,067	1,091
	<u> </u>	<u> </u>	<u> </u>

2002 interest income includes a total of CHF 30 million (2001: CHF 32 million, 2000: CHF 14 million) received from the foundations referred to in Note 27 at commercial interest rates on the outstanding short-term debt.

6. Taxes

Income before taxes and minority interests consists of the following:

	2002	2001	2000
	<u> </u>	<u> </u>	<u> </u>
	(CHF millions)	(CHF millions)	(CHF millions)
Switzerland	3,871	3,372	2,482
Foreign	4,955	5,111	6,590
	<u> </u>	<u> </u>	<u> </u>
Total income before taxes and minority interests	8,826	8,483	9,072
	<u> </u>	<u> </u>	<u> </u>

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Current and deferred income tax expense consists of the following:

	2002	2001	2000
	<u> </u>	<u> </u>	<u> </u>
	(CHF millions)	(CHF millions)	(CHF millions)
Switzerland	(424)	(271)	(351)
Foreign	(740)	(1,005)	(1,571)
	<u> </u>	<u> </u>	<u> </u>
Total current income tax expense	(1,164)	(1,276)	(1,922)
	<u> </u>	<u> </u>	<u> </u>
Switzerland	(71)	(281)	(83)
Foreign	(236)	175	185
	<u> </u>	<u> </u>	<u> </u>
Total deferred tax (expense)/income	(307)	(106)	102
	<u> </u>	<u> </u>	<u> </u>
Share of tax of associated companies	(19)	(58)	
	<u> </u>	<u> </u>	<u> </u>
Total income tax expense	(1,490)	(1,440)	(1,820)
	<u> </u>	<u> </u>	<u> </u>

The gross value of net operating loss carryforwards with their expiry dates is as follows:

2002	2001	2000
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	(CHF millions)	(CHF millions)	(CHF millions)
one year	43	30	22
two years	11	26	74
three years	17	75	21
four years	19	36	51
five years	277	35	80
more than five years	749	565	587
Total	1,116	767	835

Of these gross values CHF 429 million has been capitalized as a deferred tax asset (2001: CHF 535 million; 2000: CHF 411 million).

CHF 3 million of operating tax loss carryforwards expired during 2002 (2001: CHF 2 million; 2000: CHF 17 million).

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Analysis of tax rate:

The main elements contributing to the difference between the Group's overall expected tax rate (the weighted average tax rate based on the result before tax of each subsidiary) and the effective tax rate are:

	2002	2001	2000
	%	%	%
Expected tax rate	15.6	17.7	19.5
Effect of disallowed expenditures	2.4	3.1	1.5
Effect of utilization of tax losses brought forward from prior periods	(0.5)	(0.3)	(0.3)
Effect of income taxed at reduced rates	(1.9)	(1.6)	(1.9)
Prior year and other items	1.3	(1.9)	1.3
Effective tax rate	16.9	17.0	20.1

The utilization of tax loss carryforwards lowered the tax charge by CHF 41 million, CHF 22 million, and CHF 26 million in 2002, 2001 and 2000, respectively.

7. Earnings per share (EPS)

Basic earnings per share

Basic earnings per share is calculated by dividing the net income attributable to shareholders by the weighted average number of shares outstanding during the year, excluding from the issued shares the average number of shares purchased by the Group and held as treasury shares.

	2002	2001	2000
Net income (CHF millions)	7,313	7,024	7,210
Weighted average number of shares outstanding	2,515,311,685	2,571,673,365	2,613,547,597
Basic earnings per share (CHF)	2.91	2.73	2.75

Diluted earnings per share

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For the diluted earnings per share the weighted average number of shares outstanding is adjusted to assume conversion of all potential dilutive shares. The Group's convertible debt represents a potential dilution in the earnings per share to the extent that it is not covered by a hedge with non-consolidated employee share participation and employee benefit foundations to deliver the required number of shares on conversion.

The diluted EPS calculation takes into account all potential dilutions to the earnings per share arising from the convertible debt and call options on Novartis shares. Net income is adjusted to eliminate the applicable convertible debt interest expense less the tax effect.

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Share equivalents of 16.2 million (2001: 12.2 million; 2000: 1.8 million) were excluded from the calculation of diluted earnings per share as they were anti-dilutive.

	2002	2001	2000
Net income (CHF millions)	7,313	7,024	7,210
Elimination of interest expense on convertible debt (net of tax effect) (CHF millions)	3	3	2
Net income used to determine diluted earnings per share (CHF millions)	7,316	7,027	7,212
Weighted average number of shares outstanding	2,515,311,685	2,571,673,365	2,613,547,597
Adjustment for assumed conversion of convertible debt		1,507,027	1,608,676
Call options on Novartis shares	54,891,036	4,574,401	
Adjustment for dilutive share options	2,264,236	1,010,963	982,560
Weighted average number of shares for diluted earnings per share	2,572,466,957	2,578,765,756	2,616,138,833
Diluted earnings per share (CHF)	2.84	2.72	2.75

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8. Tangible fixed asset movements

	Land	Buildings	Machinery	Plant under Construction and other equipment	2002	2001
	(in CHF millions)					
Cost						
January 1	377	6,463	9,880	1,149	17,869	17,551
Consolidation changes	21	118	318	23	480	(47)
Additions	79	597	806	179	1,661	1,351
Disposals	(6)	(303)	(487)	(10)	(806)	(789)
Translation effects	(42)	(468)	(734)	(175)	(1,419)	(197)
December 31	429	6,407	9,783	1,166	17,785	17,869

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	Land	Buildings	Machinery	Plant under Construction and other equipment	2002	2001
Accumulated depreciation						
January 1	(1)	(3,093)	(5,715)		(8,809)	(8,521)
Consolidation changes		(45)	(288)		(333)	74
Depreciation charge		(205)	(716)		(921)	(939)
Depreciation on disposals		127	465		592	486
Impairment charge		(10)	(35)		(45)	(30)
Translation effects		169	435		604	121
December 31	(1)	(3,057)	(5,854)		(8,912)	(8,809)
Net book value December 31	428	3,350	3,929	1,166	8,873	9,060
Insured value December 31					21,529	21,060
Net book value of tangible fixed assets under finance lease contracts					212	13

At December 31, 2002 commitments for purchases of tangible fixed assets totaled CHF 97 million (2001: CHF 261 million).

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9. Intangible asset movements

	Goodwill	Product and marketing rights	Trademarks	Software	Other intangibles	2002	2001
	(in CHF millions)						
Cost							
January 1	2,736	4,222	614	85	333	7,990	6,508
Consolidation changes		1	(11)	49	457	496	752
Additions	937	51	13	5	65	1,071	696
Disposals	(7)	(6)	(6)	(6)	(17)	(42)	(42)
Translation effects	(399)	(330)	(95)	(9)	(58)	(891)	76
December 31	3,267	3,938	515	124	780	8,624	7,990
Accumulated amortization							
January 1	(442)	(577)	(132)	(62)	(229)	(1,442)	(678)
Consolidation charges	(20)	(50)	(1)	(42)	(82)	(195)	(16)
Amortization charge	(141)	(286)	(41)	(16)	(67)	(551)	(564)
Disposals	3	2	6	6	26	43	45
Impairment charge	(369)	(102)	(18)		(6)	(495)	(216)
Translation effects	94	53	25	5	9	186	(13)
December 31	(875)	(960)	(161)	(109)	(349)	(2,454)	(1,442)

	Goodwill	Product and marketing rights	Trademarks	Software	Other intangibles	2002	2001
Net book value December 31	2,392	2,978	354	15	431	6,170	6,548

The principal additions in both years were goodwill on acquisitions and in 2001 pitavastatin marketing rights.

In 2002, goodwill impairment charges were recorded of CHF 369 million mainly related to the Pharmaceuticals division research and biotechnology activities of Genetic Therapy Inc., Systemix Inc., Imutran Ltd., due to changes in the research and development strategy, and relating to the Medical Nutrition and OTC business units. The majority of the product and marketing rights impairment related to a CHF 80 million charge to the pitavastatin rights (2001: CHF 216 million).

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10. Investment in associated companies

Novartis has the following significant investments in associated companies which are accounted for by using the equity method:

	Balance sheet value		Pre-tax Income statement effect		
	2002	2001	2002	2001	2000
	(in CHF millions)				
Roche Holding AG, Switzerland	7,667	5,150	(180)	(39)	
Chiron Corporation, USA	1,398	1,544	167	185	97
Others	35	21	3	(7)	1
Total	9,100	6,715	(10)	139	98

The Group's associated companies' accounting standards are adjusted to IAS in cases where IAS is not already used.

Due to the various estimates that have been made in applying the equity method accounting treatment for Roche Holding AG ("Roche") and Chiron Corporation ("Chiron"), adjustments may be necessary in succeeding years as more financial and other information becomes publicly available.

Roche Holding AG

The Group's holding in Roche has been increased during 2002 from 21.3% to 32.7% of the voting shares of the company. This investment represents 6.2% of the total outstanding voting and non-voting equity instruments. In order to apply the equity method of accounting, independent appraisers have been used to estimate the fair value of Roche so as to determine the Novartis share of tangible and intangible assets and the amount of the residual goodwill at the time of acquisition. The purchase price allocations for the investments in 2001 and 2002 were made on publicly available information at the time of acquisition of the shares. As a result of the proposed divestiture of Roche's Vitamins and Fine Chemicals division, the fair value allocation of Novartis' share of tangible and intangible assets has been revised in 2002 and is subject to further adjustments as more information becomes available. Please refer to Note 32 Subsequent Events (unaudited).

The purchase price allocation is as follows:

**CHF
millions**

Identified intangible assets	4,630
Other net liabilities	(38)
Residual goodwill	3,453
Total purchase price	8,045
Net income effect 2002	(145)
Other accumulated equity instruments	(233)
December 31, 2002 balance sheet value	7,667

The increase in value allocated to inventory has been expensed, based on its expected usage. The identified intangible assets principally relate to the value of currently marketed products and are being

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amortized straight-line over their estimated average useful life of 20 years. The residual goodwill is also being amortized on a straight-line basis over 20 years.

The income statement effect for 2002 and 2001 is as follows:

	2002	2001
	(CHF millions)	(CHF millions)
Depreciation and amortization of fair value adjustments to tangible and intangible assets and goodwill	(341)	(213)
Novartis share of estimated Roche consolidated pre-tax income	161	174
Pre-tax income statement effect	(180)	(39)
Deferred tax	35	12
Net income effect	(145)	(27)

The market value of Novartis' interest in Roche at December 31, 2002 was CHF 9.2 billion (Reuter symbol ROCZ).

Chiron Corporation

The recording of the results of the strategic interest in Chiron commenced on January 1, 1995. Its equity valuation is based on the estimated Chiron equity at December 31 of each year. The amounts for Chiron incorporated into the Novartis consolidated financial statements take into account the effects stemming from differences in accounting policies between Novartis and Chiron (primarily Novartis' amortization over 10 years of in-process technology arising on Chiron's acquisitions which are written off by Chiron in the year of acquisition). The difference between the equity interest in the underlying Chiron net assets as determined under US GAAP and the carrying value of Chiron is CHF 185 million and CHF 217 million as of December 31, 2002 and 2001, respectively, and primarily relates to different values or accounting treatment of goodwill and in-process research and development at the time of acquisition. The effective shareholding of Novartis in Chiron was 42.0% at December 31, 2002 and had a market value of CHF 4.2 billion (NASDAQ symbol: CHIR).

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11. Deferred taxes

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	2002	2001
	(CHF millions)	(CHF millions)
Assets associated with employee benefit liabilities	395	440
net operating loss carryforwards	303	215
inventory	1,292	1,303
intangible assets	80	193
other provisions and accruals	1,190	1,181
Less: valuation allowance	(203)	(97)
Deferred tax assets less valuation allowance	3,057	3,235
Liabilities associated with tangible fixed asset depreciation	796	872
prepaid pensions	1,262	1,208
other provisions and accruals	1,614	1,526
inventories	287	279
Total liabilities	3,959	3,885
Net deferred tax liability	902	650

A reversal of the valuation allowance could occur when circumstances make the realization of deferred tax assets probable. This would result in a decrease in the Group's effective tax rate.

At both December 31, 2002 and 2001, unremitted earnings of CHF 35 billion have been retained by subsidiary companies for reinvestment. No provision is made for income taxes that would be payable upon the distribution of such earnings. If the earnings were remitted, an immaterial income tax charge would result based on the tax statutes currently in effect.

	2002	2001
	(CHF millions)	(CHF millions)
Temporary differences on which no deferred tax has been provided as they are permanent in nature:		
write-down of investments in subsidiaries.	2,012	1,635
goodwill from acquisitions	1,276	1,230

12. Other financial assets

	2002	2001
	(CHF millions)	(CHF millions)
Other investments and long-term loans	1,833	2,185
Prepaid pension	4,951	4,842
Total	6,784	7,027

Other investments are valued at market value.

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During 2002, CHF 100 million (2001: CHF 20 million) of unrealized losses on investments were considered to be other than temporary and were charged to the income statement.

13. Inventories

	2002	2001
	(CHF millions)	(CHF millions)
Raw material, consumables	699	772
Finished products	3,460	3,340
Total inventories	4,159	4,112

At December 31, 2002, 2001 and 2000 inventory write-downs of CHF 354 million, CHF 368 million and CHF 219 million respectively were deducted in arriving at the inventory values.

14. Trade accounts receivable

	2002	2001
	(CHF millions)	(CHF millions)
Total	5,496	5,645
Provision for doubtful receivables	(306)	(296)
Total trade accounts receivable, net	5,190	5,349

15. Other current assets

	2002	2001
	(CHF millions)	(CHF millions)
Withholding tax recoverable	210	294
Gerber Life insurance receivables	290	304
Prepaid expenses	460	303
third parties		
associated companies	2	8
Other receivables	1,292	1,639
third party		
associated companies	10	15
Total other current assets	2,264	2,563

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16. Marketable securities and derivative financial instruments

Market risk: The Group is exposed to market risk, primarily related to foreign exchange, interest rates and market value of the investment of liquid funds. Management actively monitors these exposures. To manage the volatility relating to these exposures the Group enters into a variety of derivative financial instruments. The Group's objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in interest rates, foreign currency rates and market rates of investment of liquid funds and of the currency exposure of certain net investments in foreign subsidiaries. It is the Group's policy and practice to use derivative financial

instruments to manage exposures and to enhance the yield on the investment of liquid funds. The Group does not enter any financial transaction containing a risk that cannot be quantified at the time the transaction is concluded; i.e. it does not sell short assets it does not have, or does not know it will have, in the future. The Group only sells existing assets or hedges transactions and future transactions (in the case of anticipatory hedges) it knows it will have in the future based on past experience. In the case of liquid funds it writes options on assets it has, or on positions it wants to acquire, and for which it has the required liquidity. The Group therefore expects that any loss in value for these instruments generally would be offset by increases in the value of the hedged transactions.

(a) Foreign exchange rates

The Group uses the CHF as its reporting currency and is therefore exposed to foreign exchange movements, primarily in US, European, Japanese, other Asian and Latin American currencies. Consequently, it enters into various contracts which change in value as foreign exchange rates change, to preserve the value of assets, commitments and anticipated transactions. The Group uses forward contracts and foreign currency option contracts to hedge certain anticipated foreign currency revenues and the net investment in certain foreign subsidiaries.

(b) Commodities

The Group has only a very limited exposure to price risk related to anticipated purchases of certain commodities used as raw materials by the Group's businesses. A change in those prices may alter the gross margin of a specific business, but generally by not more than 10% of that margin and is thus below materiality levels. Accordingly, the Group does not enter into commodity future, forward and option contracts to manage fluctuations in prices of anticipated purchases.

(c) Interest rates

The Group manages its exposure to interest rate risk by changing the proportion of fixed rate debt and variable rate debt in its total debt portfolio. To manage this mix the Group may enter into interest rate swap agreements, in which it exchanges the periodic payments, based on a notional amount and agreed upon fixed and variable interest rates.

Use of the above-mentioned derivative financial instruments has not had a material impact on the Group's financial position at December 31, 2002 and 2001 or the results of operations for the years ended December 31, 2002, 2001 and 2000.

Counterparty risk: Counterparty risk encompasses issuer risk on marketable securities, settlement risk on derivative and money market contracts and credit risk on cash and time deposits. Issuer risk is minimized by only buying securities which are at least AA rated. Settlement and credit risk is reduced by the policy of entering into transactions with counterparties that are usually at least AA rated banks or

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financial institutions. Exposure to these risks is closely monitored and kept within predetermined parameters.

The Group does not expect any losses from non-performance by these counterparties and does not have any significant grouping of exposures to financial sector or country risk.

Derivative financial instruments: The following tables show the contract or underlying principal amounts and fair values of derivative financial instruments analyzed by type of contract at December 31, 2002 and 2001. Contract or underlying principal amounts indicate the volume of business outstanding at the balance sheet date and do not represent amounts at risk. The fair values are determined by the markets or standard pricing models at December 31, 2002 and 2001.

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2002	2001	2002	2001	2002	2001
Derivative financial instruments						

(in CHF millions)

Currency related instruments

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	Contract or underlying principal amount	Positive fair values	Negative fair values
Forward foreign exchange rate contracts	4,724	32	(214)
Over the counter currency options	8,680	304	(149)
Cross currency swaps	2,770	42	(33)
Total of currency related instruments	20,660	385	(422)
Interest related instruments			
Interest rate swaps	4,192	69	(1)
Forward rate agreements	3,850		(10)
Interest rate options	950	2	(7)
Total of interest rate related instruments	8,992	71	(18)
Options on equity securities	2,925	149	(135)
Total derivative financial instruments included in marketable securities and in short-term financial debt	32,577	605	(575)
Currency related instruments included in other current assets and liabilities			
Forward foreign exchange rate contracts	3,367	198	62
Over the counter currency options	1,673	10	(2)
Total currency related instruments included in other current assets and liabilities	5,040	208	(2)
Total derivative financial instruments	37,617	813	(577)

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The contract or underlying principal amount of derivative financial instruments at December 31, 2002 and 2001 are set forth by currency in the table below.

	CHF	EUR	USD	JPY	Other currencies	Total 2002	Total 2001
(in CHF millions)							
Currency related instruments							
Forward foreign exchange rate contracts		877	8,768	2,277	125	12,047	7,114
Over the counter currency options		3,207	6,597		1,079	10,883	13,259
Cross currency swaps		2,770				2,770	1,332
Currency related derivatives		6,854	15,365	2,277	1,204	25,700	21,705
Interest rate related instruments							
Interest rate swaps	3,900	292				4,192	3,700
Forward rate agreements	3,850					3,850	6,450
Interest rate options	950					950	150
Interest rate related derivatives	8,700	292				8,992	10,300
Options on equity securities		393	2,532			2,925	12,018

	CHF	EUR	USD	JPY	Other currencies	Total 2002	Total 2001
Total derivative financial instruments	8,700	7,539	17,897	2,277	1,204	37,617	44,023

Contract or underlying principal amount		Fair values	
2002	2001	2002	2001

(in CHF millions)

Derivative financial instruments effective for hedge accounting purposes*Anticipated transaction hedges*

Forward foreign exchange rate contracts	4,186	2,381	223	83
Over the counter currency options	1,674	4,661	10	66

Total of anticipated transaction hedges*Net investment in foreign subsidiary hedges*

Forward foreign exchange rate contracts	2,720	(133)
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Total of net investment in foreign subsidiary hedges*Available-for-sale security hedges*

Options on securities	2,611	(125)
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Total of available-for-sale security hedges

Total of derivative financial instruments effective for hedge accounting purposes	5,860	12,373	233	(109)
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All of the hedging instruments used for anticipated transactions mature within twelve months and were contracted with the intention of hedging anticipated transactions which are expected to occur in 2003.

	2002	2001
(in CHF millions)		
Marketable securities, time deposits and derivative financial instruments		
Available-for-sale marketable securities		
Equity securities	1,763	3,448
Debt securities	5,952	4,560
Total available-for-sale marketable securities	7,715	8,008
Time deposits longer than 90 days	1,076	2,689
Derivative financial instruments	495	135
Accrued interest on derivative financial instruments	53	32
Accrued interest on debt securities	128	141

	2002	2001
	<u> </u>	<u> </u>
Total marketable securities, time deposits and derivative financial instruments	9,467	11,005
	<u> </u>	<u> </u>

During 2002, no unrealized losses on available-for-sale marketable securities were considered to be other than temporary and charged to the income statement (2001: CHF 81 million).

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17. Details of share capital movements

	Number of shares ⁽¹⁾					
	December 31, 2000, before share split	December 31, 2000 after share split ⁽²⁾	Movement in year	December 31, 2001	Movement in year	December 31, 2002
Total Novartis shares	72,130,117	2,885,204,680		2,885,204,680	(61,054,680)	2,824,150,000
Treasury shares						
Shares reserved for convertible bonds	117,916	4,716,640	(212,886)	4,503,754	(4,503,754)	
Shares reserved for call options			54,901,962	54,901,962		54,901,962
Unreserved treasury shares	6,845,311	273,812,440	3,806,264	277,618,704	16,658,715	294,277,419
Total treasury shares	6,963,227	278,529,080	58,495,340	337,024,420	12,154,961	349,179,381
Total outstanding shares	65,166,890	2,606,675,600	(58,495,340)	2,548,180,260	(73,209,641)	2,474,970,619
(in CHF millions)						
Share capital	1,443	1,443		1,443	(31)	1,412
Treasury shares	(139)	(139)	(30)	(169)	(6)	(175)
Outstanding share capital	1,304	1,304	(30)	1,274	(37)	1,237

(1) All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 277,069,019 treasury shares, are dividend bearing.

(2) On March 22, 2001 Novartis AG's Annual General Meeting approved the division of each registered share of Novartis AG into 40 identical registered shares and thereby to change their nominal value from CHF 20.00 each to CHF 0.50 each.

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18. Long-term financial debts

	2002	2001
	(CHF millions)	(CHF millions)
Convertible bonds		1,182
Straight bonds	3,617	2,325
Liabilities to banks and other financial institutions ⁽¹⁾	167	277
Finance lease obligations	203	4
Total (including current portion of long-term debt)	3,987	3,788
Less current portion of long-term debt	(156)	(1,288)
Total long-term debts	3,831	2,500

Convertible bonds**USD**

USD 750 million 2.00% convertible bonds 1995/2002 of
Novartis Capital Ltd., British Virgin Islands⁽²⁾

1,163

CHF

CHF 750 million 1.25% convertible bonds 1995/2002 of
Novartis Capital Ltd., British Virgin Islands⁽³⁾

19

Total convertible bonds

1,182

Straight bonds**USD**

USD 300 million 6.625% Euro Medium Term Note 1995/2005
of Novartis Corporation, Florham Park, New Jersey, USA

420

504

USD

USD 250 million 6.625% Euro Medium Term Note 1995/2005
of Novartis Corporation, Florham Park, New Jersey, USA

351

420

USD

USD 36 million 9.0% bonds 2006 of Gerber Products Company,
Fremont, Michigan, USA

50

60

EUR

EUR 900 million 4.0% bond 2001/2006 of Novartis Securities
Investment Ltd., Hamilton, Bermuda⁽⁴⁾

1,319

1,341

EUR 1 billion 4.0% bond 2002/2007 of Novartis Securities
Investment Ltd., Hamilton, Bermuda⁽⁵⁾

1,477

Total straight bonds

3,617

2,325

(1) Average interest rate 3.4% (2001: 3.6%).

(2) Bonds of USD 10,000 par value were convertible up to September 30, 2002 into approximately 384.17 shares of Novartis AG. The Group either held treasury shares for the conversion or could obtain the shares under a hedging transaction at the conversion rate. At December 31, 2001 bonds totaling USD 32.6 million had been converted. In 2002, all the remainder of the bonds except USD 120,000 were converted and these USD 120,000 of bonds were repaid.

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(3) Bonds of CHF 5,000 par value were convertible up to October 9, 2002 into 200 shares of Novartis AG and 5 shares of Syngenta AG with each converting bondholder receiving CHF 239.95 per bond in cash. The Group held treasury shares and Syngenta AG shares to cover the conversion. At December 31, 2001 bonds totaling CHF 730.8 million had been converted. In 2002, all the remainder of the bonds were converted.

(4) Swapped into Japanese yen on inception and transformed into Swiss francs in 2002.

(5) Swapped into Japanese yen on inception.

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	2002	2001
	(CHF millions)	(CHF millions)
Breakdown by maturity:		
2002		1,288
2003	156	38
2004	49	49
2005	863	940
2006	1,384	1,416
2007	1,490	
Thereafter	45	57
Total	3,987	3,788

Breakdown by currency:		
USD	1,042	2,174
EUR	137	174
JPY	1,477	1,392
CHF	1,320	20
Others	11	28
Total	3,987	3,788

	2002 Balance Sheet	2002 Fair Values	2001 Balance Sheet	2001 Fair Values
	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)
Fair value comparison:				
Convertible bonds			1,182	1,713
Straight bonds	3,617	3,750	2,325	2,348
Others	370	370	281	281
Total	3,987	4,120	3,788	4,342

2002	2001
(CHF millions)	(CHF millions)

Collateralized long-term debts and pledged assets

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	2002	2001
Total amount of collateralized long-term financial debts	166	235
Total net book value of tangible fixed assets pledged as collateral for long-term financial debts	94	81

The percentage of fixed rate debt to total financial debt was 46% at both December 31, 2002 and 2001.

The financial debts including short-term financial debts, contain only general default covenants. The Group is in compliance with these covenants.

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19. Provisions and other long-term liabilities

	2002	2001
	(CHF millions)	(CHF millions)
Employee benefits		
unfunded defined benefit plans	1,042	1,102
other long-term employee benefits and deferred compensation	251	186
Other post-employment benefits	591	698
Liabilities for insurance activities	907	719
Environmental provisions	226	224
Provision for legal and product liability settlements	357	337
Deferred purchase consideration	13	
Restructuring provision	4	10
Other provisions	635	554
Total	4,026	3,830

(a) Environmental matters

Novartis has provisions in respect to environmental remediation costs in accordance with the accounting policy described in Note 1. These provisions include future remediation payments totaling CHF 22 million which have been discounted at 6% per annum to a recorded liability of CHF 11 million. These discounted amounts will be paid out over the period of remediation for the applicable sites, which is expected to be 30 years. The accrual recorded at December 31, 2002 consists of CHF 115 million provided for remediation at third-party sites and CHF 114 million for remediation of owned facilities. In the USA, Novartis has been named under federal legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as a potentially responsible party ("PRP") in respect to certain sites. Novartis actively participates in, or monitors, the clean-up activities at the sites in which it is a PRP. The estimated reserve takes into consideration the number of other PRPs at each site and the identity and financial position of such parties in light of the joint and several nature of the liability.

The requirement in the future for Novartis ultimately to take action to correct the effects on the environment of prior disposal or release of chemical substances by Novartis or other parties, and its costs, pursuant to environmental laws and regulations, is inherently difficult to estimate. The material components of the environmental provisions consist of a risk assessment based on investigation of the various sites. Novartis' future remediation expenses are affected by a number of uncertainties which include, but are not limited to, the method and extent of remediation, the percentage of material attributable to Novartis at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties.

In connection with the 1997 spin-off of CIBA Specialty Chemicals AG ("CSC") from Novartis AG, a Novartis affiliate has agreed to reimburse CSC 50% of the costs: (i) associated with environmental liabilities arising in the United States from the operations of the specialty chemicals business of the US affiliates of the former Ciba-Geigy AG, and (ii) which exceed reserves agreed between that affiliate and CSC. The reimbursement obligations are not subject to any time limits but could terminate for certain liabilities in the US upon the occurrence of certain

contingencies which include the merger of CSC or the sale of its assets.

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Novartis believes that its total reserves for environmental matters are adequate based upon currently available information, however, given the inherent difficulties in estimating liabilities in this area, it cannot be guaranteed that additional costs will not be incurred beyond the amounts accrued. The effect of resolution of environmental matters on results of operations cannot be predicted due to uncertainty concerning both the amount and the timing of future expenditures and the results of future operations. Management believes that such additional amounts, if any, would not be material to the Novartis financial condition but could be material to the Novartis results of operations in a given period.

The following table shows the movement in the environmental liability provisions during 2002, 2001 and 2000:

	2002	2001	2000
	(CHF millions)	(CHF millions)	(CHF millions)
January 1	228	214	379
Cash payments	(4)	(3)	(35)
Releases	(1)	(6)	
Additions	13	22	24
Effect of Agribusiness spin-off			(166)
Translation effect, net	(7)	1	12
December 31	229	228	214
Less short-term liability	(3)	(4)	(7)
Long-term liability at December 31	226	224	207

(b) Legal and product liabilities

General

A number of Group companies are the subject of litigation arising out of the normal conduct of their business, as a result of which claims could be made against them which, in whole or in part, might not be covered by insurance. In the opinion of Group management, however, the outcome of the actions referred to will not materially affect the Group's financial position, result of operations or cash flow. In the interest of transparency Novartis is providing information on the following cases:

SMON (Subacute Myelo Optico Neuropathy)

In 1996 Ciba-Geigy, one of the predecessor companies of Novartis, together with two other pharmaceutical companies, settled certain product liability issues related to sales of its product Clioquinol in Japan. Under the settlement, Novartis is required to pay certain future health care costs of the claimants.

Ritalin

In 2000, Novartis was named as defendant in 5 class action lawsuits and several claims involving *Ritalin*. The plaintiffs are consumers and third party payors who have alleged that Novartis and others have been involved in "fraud and conspiracy" in the over-promotion of ADHD (attention deficit

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hyperactive disorder) and *Ritalin*. All class actions have been dismissed with only two personal injury claims remaining on appeal.

Augmentin® (amoxicillin/potassium clavulanate)

In June 2002, Geneva Pharmaceuticals Inc., (Geneva) launched a generic version of Augmentin® in the US after a May 2002 decision of the US District Court for the Eastern District of Virginia invalidating certain GlaxoSmithKline (GSK) patents pertaining to Augmentin®. GSK has appealed this ruling.

In addition GSK has initiated actions against Novartis affiliates in Colorado state court and before the US International Trade Commission, alleging that the potassium clavulanate in the product sold by Geneva is produced using a micro organism strain allegedly stolen from GSK, an allegation which the Novartis affiliates deny.

PPA

Novartis affiliates are parties to over 300 lawsuits in the United States brought by people in 2001 and 2002 who claim to have been injured by products containing phenylpropanolamine (PPA) sold by certain of those affiliates. These cases are in various stages of prosecution with the first trials set for 2003.

Pharmaceutical Antitrust Litigation

Novartis affiliates, along with numerous other prescription drug manufacturers, are defendants in various actions brought by certain US retail pharmacies, alleging antitrust and pricing violations.

Parlodel

Since November 1986, Novartis affiliates have been defendants in lawsuits alleging personal injuries resulting from the administration of *Parlodel* for, among other indications, inhibition of post partum lactation. Currently, there are 25 cases pending. They are in various stages of discovery and/or motion practice. Four cases currently have trial dates in 2003.

Borison and Diamond

Dr. Borison and Dr. Diamond were clinical investigators who had conducted clinical trials for many pharmaceutical companies, including Ciba-Geigy and Sandoz. Borison and Diamond were indicted by the State of Georgia for diverting payments from pharmaceutical companies from their employer, the Medical College of Georgia, to themselves. The investigation also brought to light allegations relating to informed consent and faulty patient care practices. Borison and Diamond pleaded guilty to a variety of felonies. Several lawsuits, known as Hodges, Huckeba, Lewis and Thomas, were filed against Novartis Pharmaceuticals Corporation on behalf of patients who participated in the clinical trials. Of these cases, only three remain. Of these, one, Huckeba, is a purported class action brought on behalf of 185 individuals. The cases are all in the early stages of discovery.

Terazosin

Geneva Pharmaceuticals, Inc. is a defendant in a number of lawsuits in the United States claiming injuries and damages allegedly arising out of violation of anti-trust laws in the settlement, by Geneva and

Abbott Pharmaceuticals, of a contentious patent litigation involving Abbott's Hytrin® and Geneva's generic equivalent product.

Enteral Pump Investigation

The Department of Justice (DOJ) in the United States is investigating marketing and pricing practices of the enteral pump industry in the US. Novartis Nutrition Corporation is cooperating in the investigation.

Novartis does not believe plaintiffs were injured as a result of the actions of its affiliates and they are vigorously defending each of the cases described above.

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The following table shows the movements in the legal and product liability provisions during 2002, 2001 and 2000:

	2002	2001	2000
	(CHF millions)	(CHF millions)	(CHF millions)
January 1	530	639	496
Cash payments	(93)	(190)	(43)
Releases	(26)	(24)	
Additions	225	129	283
Effect of Agribusiness spin-off			(98)
Translation effect, net	(46)	(24)	1
December 31	590	530	639
Less short-term liability	(233)	(193)	(282)
Long-term liability at December 31	357	337	357

20. Short-term financial debts

	2002	2001
	(CHF millions)	(CHF millions)
Interest bearing employee accounts	1,145	1,134
Other bank and financial debt	890	1,637
Commercial paper	1,332	1,004
Current portion of long-term financial debt	156	1,288
Financial obligation for repurchase agreements		11
Fair value of derivative financial instruments	465	1,103
Total	3,988	6,177

The balance sheet values of short-term financial debt, other than the current portion of long-term financial debts, approximates to the estimated fair value due to the short-term nature of these instruments.

The weighted average interest rate on the bank and other financial debt including employee accounts was 3.5%, 3.8%, and 4.5% as of December 31, 2002, 2001, and 2000 respectively.

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21. Other short-term liabilities

	2002	2001
	(CHF millions)	(CHF millions)
Income and other taxes	767	879
Restructuring liabilities	133	226
Accrued expenses	3,321	3,479
Potential claims from insurance activities	289	299
Social security/pension funds	98	101
Environmental liabilities	3	4
Deferred income relating to government grants	19	22

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	2002	2001
Deferred purchase consideration		240
Goods returned and commission liabilities	13	14
Legal and product liability settlements	233	193
Other payables	970	754
Total	5,846	6,211

Restructuring charges

The Group has experienced significant merger and divestment activity since 1996, when Sandoz AG and Ciba-Geigy AG merged to form Novartis AG, and the Group divested Ciba Specialty Chemicals ("CSC") with effect from January 1, 1997. Restructuring accruals in 1996 totaled CHF 4,126 million, comprised of employee termination costs of CHF 1,945 million, other third party costs of CHF 1,594 million and tangible fixed asset impairments of CHF 587 million. Charges for restructuring plans were related to retained activities, including the reduction of excess staffing, the streamlining of facilities and operations and other restructuring measures. 12,000 employees were identified in the original plan all of whom have now left the Group. All other significant actions associated with the restructuring charge were completed by December 31, 2002 with the exception of CHF 26 million relating primarily to non-cancellable lease payments for unoccupied office space in the U.S.

In October 2000, the CIBA Vision business unit acquired Wesley Jessen VisionCare Inc., a leading worldwide developer, manufacturer and marketer of specialty contact lenses. Total costs of CHF 118 million were incurred in connection with the integration and restructuring of the CIBA Vision and Wesley Jessen activities worldwide. CHF 41 million was charged to operating income and CHF 77 million was included in the net assets acquired. The total cost comprised employee termination costs of CHF 59 million, other third party costs of CHF 35 million and tangible fixed asset impairments of CHF 24 million. 1,100 employees were identified in the original plan, all of whom have left the Group as of December 31, 2002.

In November 2000, charges of CHF 15 million were incurred in conjunction with the closure and consolidation of part of the Generics operations in the USA. All of these charges were for employee termination costs. 200 employees were identified in the original plan, all of whom have left the Group as of December 31, 2002.

In December 2000, charges of CHF 40 million were incurred in conjunction with the closure and sale of the Pharmaceuticals division Summit site in the USA. The charges comprised employee termination costs of CHF 10 million and other third party costs of CHF 30 million. 122 employees were identified in the original plan, of which 48 remain employed by the Group as of December 31, 2002, but all of whom are expected to leave in 2003. All other significant actions associated with the plan are expected to be completed by March 2003.

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In May 2001, charges of CHF 21 million were incurred in relation to the closure of the Consumer Health production facility in Kings Langley, UK. The charges comprised employee termination costs of CHF 19 million and other third party costs of CHF 2 million. 250 employees were identified in the original plan, all of whom have left the Group as of December 31, 2002.

In October 2002, charges of CHF 30 million were incurred in conjunction with the divestment of the Food & Beverage business to Associated British Foods plc (ABF). The charges comprised employee termination costs of CHF 14 million and other third party costs of CHF 16 million. Originally 933 associates were identified as assigned to this business, of whom 866 were able to transfer to ABF. Natural attrition and internal redeployment limited necessary job losses to 45, of whom 42 remained employed by the Group as at December 31, 2002, but all of whom are expected to leave in 2003. All significant actions associated with the plan are expected to be completed during 2003.

In December 2002, provision was made for charges of CHF 40 million in conjunction with the plan to re-organize the Health Food and Slimming and Sports Nutrition businesses into a stand-alone unit called Nutrition & Santé. The charges comprised employee termination costs of CHF 26 million and other third party costs of CHF 14 million. It is expected that 120 job losses will result in 2003. All actions will be completed during 2003 and 2004.

In December 2002 charges of CHF 14 million were incurred in conjunction with the plan to restructure the OTC business. The charges comprised employee termination costs of CHF 12 million and other third party costs of CHF 2 million. It is expected that approximately 90 positions would be impacted by the restructuring, which is planned to be completed during 2003.

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The releases to income in 2002, 2001 and 2000 of CHF 36 million, CHF 18 million and CHF 39 million respectively were mainly due to settlement of liabilities at lower amounts than originally anticipated.

Tangible fixed asset impairments are determined based on the review of the carrying values of tangible fixed assets. Write-downs are recorded for tangible fixed assets impaired or related to activities to be restructured, divested or abandoned. The provision is transferred to accumulated depreciation as the tangible fixed assets are restructured, divested or abandoned.

Other third party costs are mainly associated with lease and other obligations due to the abandonment of certain facilities.

In 2002, there were no (2001: CHF 30 million, 2000: CHF 7 million) tangible fixed asset impairments relating to restructuring which were charged directly to the income statement without being recorded in the restructuring provision.

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	Employee termination costs	Tangible fixed asset impairments	Other third party costs	Total
	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)
Balance at January 1, 2000	280	42	238	560
Cash payments	(201)		(91)	(292)
Releases	(20)	(8)	(11)	(39)
Additions	90	24	64	178
Non-income tangible fixed asset write-offs		(4)		(4)
Effect of Agribusiness spin-off	(10)	(2)	(6)	(18)
Translation effect, net	1	1	10	12
Balance at December 31, 2000	140	53	204	397
Cash payments	(85)		(83)	(168)
Releases	(16)	(1)	(1)	(18)
Additions	19		2	21
Translation effect, net	1		3	4
Balance at December 31, 2001	59	52	125	236
Cash payments	(30)		(91)	(121)
Releases	(9)	(20)	(7)	(36)
Additions	52		32	84
Non-income tangible fixed asset write-offs		(6)		(6)
Translation effect, net	(7)	(5)	(8)	(20)
Balance at December 31, 2002	65	21	51	137
Included in short-term liabilities				133
Included in long-term liabilities				4
Total				137

22. Cash flows arising from changes in net current assets and other operating cash flow items

2002	2001	2000
(CHF millions)	(CHF millions)	(CHF millions)

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	2002	2001	2000
Change in inventories	(676)	(77)	230
Change in trade accounts receivable and other net current assets	390	33	(173)
Change in trade accounts payable	113	249	106
Total	(173)	205	163

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23. Cash flows arising from major acquisitions and divestments of subsidiaries

The following is a summary of the cash flow impact of the major divestments and acquisitions of subsidiaries:

	2002 Acquisitions	2002 Divestments	2001 Acquisitions	2001 Divestments	2000 Acquisitions	2000 Divestments
(CHF millions)						
Tangible fixed assets	(251)	90	(52)	23	(199)	2,491
Other long-term assets	(42)	7	(61)		(105)	2,415
Inventories	(187)	28	(46)		(196)	2,551
Trade accounts receivable and other current assets	(158)	49	(73)		(165)	2,631
Marketable securities, cash and short-term deposits	(154)	30	(18)		(51)	(70)
Long-term and short-term debt to third parties	8	(31)	148		200	(3,336)
Trade accounts payable and other liabilities	207	32	83	2	635	(2,918)
Net assets acquired/divested	(577)	205	(19)	25	119	3,764
Less acquired/divested liquidity	153	(30)	18		51	70
Less decrease in investments in associated companies			111			
Sub-total	(424)	175	110	25	170	3,834
Goodwill	(937)		(349)		(1,612)	
Changes in equity and minority interests due to:						
net assets transferred to Syngenta						(4,463)
proceeds received from Novartis shareholders in respect of Syngenta related purchase rights						687
others						12
Divestment gains		206		45		1
Amount settled in treasury shares	133					
Net Cash Flow	(1,228)	381	(239)	70	(1,442)	71

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2002	2002	2001	2001	2000	2000
Acquisitions	Divestments	Acquisitions	Divestments	Acquisitions	Divestments

The significant changes in the companies that have been consolidated are described in Note 2. All acquisitions, except for CHF 133 million which was for Novartis AG shares, were for cash.

The following are the cash flows from the discontinued Agribusiness division included in the 2000 consolidated cash flow statement.

	2000
	(CHF millions)
Cash flow from operating activities	1,437
Cash flow from investing activities	(166)
Cash flow from financing activities	(818)

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24. Changes in consolidated equity

- During 2001 and 2000 bonds were sold and the subsidiary holding the bonds was liquidated. This resulted in 2001 in CHF 641 million of cumulative translation differences (2000: CHF 1,041 million) and a CHF 34 million hedging loss (2000: CHF 96 million hedging gain) being transferred to financial income, net.
- The effect of the Agribusiness spin-off is shown net of the amount received from shareholders for the exercise of purchase rights of CHF 687 million.
- At the extraordinary general meeting of October 11, 2000 the shareholders reduced the Novartis AG share premium account to the legal minimum by approving a transfer of the excess to the Group's available retained earnings.
- The Board of Directors proposes a dividend of CHF 0.95 per share for 2002 (2001: CHF 0.90 per share amounting to CHF 2.3 billion which was paid in 2002; 2000: CHF 0.85 per share amounting to CHF 2.2 billion which was paid in 2001) totaling CHF 2.4 billion for all dividend bearing shares. The amount available for dividend distribution is based on the Novartis AG's shareholders' equity determined in accordance with the legal provisions of the Swiss Code of Obligations.

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- As a result of adopting IAS 39 on financial instruments from January 1, 2001, the 2002 and the 2001 changes in the fair value of financial instruments not recorded in the income statement and transfers to the income statement consist of the following:

Fair value adjustments to marketable securities	Fair value of deferred cash flow hedges	Total
(CHF millions)	(CHF millions)	(CHF millions)

January 1, 2001 fair value adjustments

	Fair value adjustments to marketable securities	Fair value of deferred cash flow hedges	Total
Available-for-sale marketable securities	1,891		1,891
Derivative financial instruments	265	138	403
Deferred tax on above	(213)	(35)	(248)
Effect of introducing IAS 39 on January 1, 2001	1,943	103	2,046
Changes in fair value:			
Available-for-sale marketable securities	(150)		(150)
Cash flow hedges		18	18
Realized gains or losses transferred to the income statement:			
marketable securities sold	(648)		(648)
derivative financial instruments	(265)	(152)	(417)
Impaired marketable securities and other financial assets	101		101
Deferred tax on above	73	11	84
Fair value adjustments at December 31, 2001	1,054	(20)	1,034
Changes in fair value:			
available-for-sale marketable securities	(766)		(766)
cash flow hedges		223	223
other financial assets	(533)		(533)
Realized gains or losses transferred to the income statement:			
marketable securities sold	(270)		(270)
derivative financial instruments		(137)	(137)
other financial assets sold	(13)		(13)
Impaired other financial assets	100		100
Reclassification in equity ⁽¹⁾	(138)	133	(5)
Deferred tax on above	153	(18)	135
Fair value adjustments at December 31, 2002	(413)	181	(232)

(1) Transfer of CHF 138 million of unrealized gains to retained earnings due to fair value adjustments on Syngenta AG shares retained by the Group after the 2000 Novartis Agribusiness spin-off and transfer of CHF 133 million of translation losses in connection with hedges of the translation of net investments in foreign subsidiaries.

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(f) The Group has investments in associated companies, principally Roche Holding AG and Chiron Corporation. The Novartis Group's share in movements in these companies' equity other than relating to net income, are allocated directly to the Novartis Group's consolidated statement of changes in equity.

(g) CHF 1.5 billion of treasury shares were acquired during 2002 under the Group's third share buy-back program on the second trading line plus an additional CHF 3.9 billion of shares on the first trading line. These amounts were offset by the sale of treasury shares for CHF 0.3 billion and a reduction in treasury shares of CHF 0.3 billion as the result of shares used as settlement for an acquisition and for the conversion of debt to equity. This resulted in a net change in Group consolidated equity of CHF 4.8 billion (2001: CHF 3.8 billion).

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CHF 3,848 million of treasury shares were acquired during 2001 under the Group's second share buy-back program. A further CHF 7 million of treasury share movements arise from non-cash treasury share purchases by the Group's associated company, Chiron Corporation, USA.

- (h) During December 2001, Novartis sold a total of 55 million ten-year call options (Low Exercise Price Options "LEPOs") on Novartis shares, with an exercise price of CHF 0.01, to a third party receiving EUR 2.2 billion in proceeds (EUR 40 per LEPO). It is the current intention that the LEPOs will be settled using Novartis treasury shares. The Group has accounted for the LEPOs as an increase in share premium at fair value less related issuance costs. Exercises will be recorded as a share issuance with no gains or losses recorded in the consolidated income statement.
- (i) During December 2001, Novartis sold a total of 55 million nine and ten-year put options on Novartis shares to a third party with an exercise price of EUR 51 receiving EUR 0.6 billion in proceeds (EUR 11 per put option). The put options can be exercised in annual tranches between the years three and ten, and can be either physically settled or net share settled at the discretion of Novartis. Under the terms of the put option agreement the number of Novartis shares required for settlement could change under certain circumstances. The contractual terms of the put options place a limit on the number of shares to be delivered in a net share settlement, such that Novartis cannot under any circumstances be forced into a physical settlement by the counterparty. If however the Group chooses to physically settle the put options, this would result in a cash payment to the counterparty. The total possible cash payment measured at the earliest possible exercise date for the two tranches of put options (2004 and 2005) would amount to EUR 3.1 billion, increasing to EUR 3.8 billion at the expiry dates (2010 and 2011) of the two tranches. Novartis may also accelerate the exercise date and expiration date for any outstanding options at any time on or after December 6, 2006 at the accreted exercise price of the put options under certain conditions. The Group has accounted for the option premium associated with the put options as an increase in share premium less related issuance costs. Exercises will be recorded as treasury share transactions with no gain or losses recorded in the consolidated income statement.
- (j) Reclassification of gains arising during the year resulting from prior to 1995 goodwill which, in accordance with IAS in effect at the time, was written off directly to equity.
- (k) On March 21, 2002 the Annual General Meeting cancelled 61.1 million shares with a nominal value of CHF 31 million.

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25. Employee benefits

a) Defined benefit plans:

The Group has, apart from the legally required social security schemes, numerous independent pension plans. For certain Group companies, however, no independent assets exist for the pension and other long-term employee benefit obligations. In these cases the related liability is included in the balance sheet.

Defined benefit pension plans cover the majority of the Group's employees. The defined benefit obligations and related assets of all major plans are reappraised annually by independent actuaries. Plan assets are recorded at fair values.

The following is a summary of the status of the main defined benefit plans at December 31, 2002, and 2001:

	2002	2001
	(CHF millions)	(CHF millions)
Funded assets of independent defined benefit	20,164	23,361
Defined benefit obligations of active and retired employees of funded plans	(15,891)	(17,901)
Funded Status	4,273	5,460
	(735)	(715)

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	2002	2001
Defined benefit obligations of active and retired employees of unfunded plans		
Unrecognized actuarial loss/(gain)	371	(1,005)
Net asset in balance sheet	3,909	3,740

The net asset in the balance sheet consists of:

	2002	2001
	(CHF millions)	(CHF millions)
Prepaid pension expense included in financial assets	4,951	4,842
Accrued pension costs included in other long-term liabilities	(1,042)	(1,102)
Total net asset	3,909	3,740

The following are the principal actuarial assumptions, used for calculating the 2002, 2001, and 2000 income statement amounts and the above December 31, 2002 and 2001 funded status of the main defined benefit plans:

	Income statement			Funded status	
Weighted average %	2002	2001	2000	2002	2001
	%	%	%	%	%
discount rate	4.5	4.6	4.1	4.5	4.6
payroll indexation	2.8	2.8	2.8	2.8	2.8
return on assets	6.1	6.1	6.2	6.1	6.1

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In some Group companies employees are covered by defined contribution plans and other long-term employee benefits. The liability of the Group for these benefits is reported in other long-term employee benefits and deferred compensation and at December 31, 2002 amounts to CHF 251 million (2001: CHF 186 million). In 2002 contributions charged to the consolidated income statement for the defined contribution plans were CHF 120 million (2001: CHF 113 million, 2000: CHF 91 million).

The number of Novartis AG shares held by pension and similar benefit funds at December 31, 2002 was 31.5 million shares with a market value of CHF 1.6 billion (2001: CHF 34 million shares with a market value of CHF 2.0 billion).

These funds disposed of 2.5 million Novartis AG shares during the year ended December 31, 2002 (2001: 8.5 million shares). The amount of dividends received on Novartis AG shares held as plan assets by these funds were CHF 31 million for the year ended December 31, 2002 (2001: CHF 34 million).

b) Defined benefit plan and other post-employment benefit scheme balance sheet and income statement details:

The Group's post-employment healthcare, insurance and other related post-employment benefits are not funded.

The following is a summary of the balance sheet movements in relation to defined benefit plans and other post-employment benefits:

Defined benefit pension plans	Other post-employment benefits
-------------------------------	--------------------------------

	Defined benefit pension plans		Other post-employment benefits	
	2002	2001	2002	2001
	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)
Asset/(liability) at January 1	3,740	3,218	(698)	(676)
Increase in prepaid pensions	109	736		
Decrease/(increase) in accrued liabilities	60	(214)	107	(22)
Asset/(liability) at December 31	3,909	3,740	(591)	(698)

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The amounts recognized in the income statement are as follows:

	Defined benefit pension plans			Other post-employment benefits		
	2002	2001	2000	2002	2001	2000
	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)
Expected return on plan assets	1,362	1,517	1,584			
Employee contributions	9	33	39			
Current service cost	(389)	(359)	(467)	(19)	(15)	(11)
Interest cost	(774)	(825)	(857)	(51)	(52)	(48)
Amortization of actuarial gains and losses	(13)	(21)	49	(5)	(5)	(18)
Income/(expense)⁽¹⁾	195	345	348	(75)	(72)	(77)

(1)

In 2001 CHF 108 million of settlement gains associated with Group restructuring were included in pension income. In 2000, settlement gains of CHF 52 million resulting from the Agribusiness spin-off were directly credited to equity.

The actual return on plan assets for 2002 taking into account realized and unrealized capital gains and losses was a loss of CHF 1,646 million (2001: CHF 737 million loss; 2000: CHF 2,949 million gain).

The following are the principal actuarial assumptions used for calculating these post-employment benefits:

	2002 Weighted average	2001 Weighted average	2000 Weighted average
	%	%	%
Discount rate	6.8	7.5	7.7
Healthcare cost trend (initial)	10.0	9.0	5.9
Healthcare cost trend (ultimate)	4.8	4.8	4.8

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26. Employee share participation plans

Employee and management share participation plans exist as follows:

(a) Novartis Share Option Plan:

Under the current plan, options, exercisable after two years and terminating after nine years, are granted annually as part of the remuneration of executive officers and other employees outside of the USA, selected by the Board's compensation committee. Each option entitles them to acquire one Novartis AG share at a predetermined strike price. Options granted before 2002 entitled the employees to acquire forty Novartis AG shares per option. In May 2001, the Novartis AG shares were split 40 to 1. The figures in the tables below have been restated for grants before 2002 to reflect this change. The number of options granted depends on the performance of the individuals and the business unit in which they work.

	2002		2001	
	Options	Weighted average exercise price	Options	Weighted average exercise price
	(millions)	(CHF)	(millions)	(CHF)
Options outstanding at January 1	7.2	59	5.9	53
Granted	5.6	62	2.5	70
Exercised	(1.0)	56	(1.0)	50
Cancelled	(0.3)	61	(0.2)	59
Outstanding at December 31	11.5	61	7.2	59
Exercisable at December 31	3.8	54	2.4	56
Weighted average fair value of options granted during the year (CHF)		11		23

All options were granted at an exercise price which was greater than the market price of the Group's shares at the grant date.

The following table summarizes information about share options outstanding at December 31, 2002:

Range of exercise prices	Options outstanding			Options exercisable	
	Number outstanding	Average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
(CHF)	(millions)	(years)	(CHF)	(millions)	(CHF)
41 50	0.8	4.1	43	0.8	43
51 70	10.7	7.2	62	3.0	57
	11.5	7.0	61	3.8	54

(b) Novartis US ADS Incentive Plan:

The US ADS Incentive Plan was introduced in 2001 and supplements the previous US Management ADS Appreciation Cash Plan. Under the US ADS Incentive Plan, options are granted annually on Novartis ADSs at a pre-determined strike price as part of the remuneration of executive officers and other employees selected by the Board's compensation committee. The number of options granted depends on the performance of the individuals and of the division/business unit in which they work. Options are exercisable after three years and terminate after ten years. Under the previous US Management ADS Appreciation Cash Plan, Novartis employees in the USA were entitled to cash compensation equivalent to the increase in the value of Novartis ADSs compared to the market price of the ADSs on the grant date.

	2002		2001	
	ADS Options	Weighted average exercise price	ADS Options	Weighted average exercise price
	(millions)	(CHF)	(millions)	(CHF)
Options outstanding at January 1	8.5	70		
Granted	15.8	52	8.8	70
Cancelled	(1.1)	56	(0.3)	70
Outstanding at December 31	23.2	55	8.5	70
Exercisable at December 31	0.7	55	0.1	70
Weighted average fair value of options granted during the year (CHF)		15		15

All ADS options were granted at an exercise price which was greater than the market price of the ADS at the grant date.

The following table summarizes information about ADS options outstanding at December 31, 2002:

Range of exercise prices	Options outstanding			Options exercisable	
	Number outstanding	Average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
(CHF)	(millions)	(years)	(CHF)	(millions)	(CHF)
50 75	23.2	8.8	55	0.7	55

(c) Long-Term Performance Plan:

This plan is offered to selected executive officers. Under the Long-Term Performance Plan, participants are awarded the right to earn shares. Actual payouts are depend on achievements of long-term targets such as economic value added relative to pre-determined strategic plan targets over a three-year period. To accommodate the starting phase of the Plan, "bridging periods" of one year duration

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were introduced for the payouts in 2001, 2002 and 2003. During 2002 a total of 232,548 shares (2001: 298,974 shares) were granted to Executive officers.

(d) Leveraged Share Savings Plan:

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This program is offered to selected executive officers and other employees, who can make an election to receive all or part of their regular cash bonus in shares. If shares are received instead of cash, the shares are blocked for a five year period. At the end of the blocking period, Novartis will match the bonus taken in shares on a one-for-one basis. During 2002, 245,838 shares (2001: 209,210 shares) were chosen to be taken under this program instead of a cash bonus.

(e) Other Management Share Plans:

The grants in relation to these programs are designed to foster long-term participation for eligible employees by aligning their contribution to the long-term performance of the Group and for special contributions. In certain programs grants vest only after five years. During 2002 a total of 117,902 shares (2001: 152,694 shares) were granted to Executive officers and other employees.

(f) New Swiss Employee Share Ownership Plan:

A new Swiss Employee Share Ownership Plan (ESOP) was introduced as of January 1, 2002 to encourage employees in Switzerland to invest in Novartis. The new ESOP provides for the annual variable incentive to be delivered wholly in the form of Novartis AG shares at a fixed date at a fair market value at that date. Employees are free to sell 50% or 100% of these shares immediately. If the employees decide to keep the shares, they will receive one free share for each two owned under the ESOP after the blocking period of three years. In spring 2003 the Swiss employees will receive shares for the first time under this scheme.

(g) Old Swiss Employee Share Ownership Plan:

In 1998, a Swiss Employee Share Ownership Plan was introduced for all employees of Swiss subsidiaries. This entitled employees after one year of service to acquire 120 shares in Novartis AG every year at a price determined by the Board's compensation committee, which was CHF 12.50 per share. From 2002 and 2001 employees were immediately required to buy the shares to which they have become entitled. During the year 406,448 shares (2001: 862,720 shares) were distributed under this plan. 2002 was the last year in which employees could purchase shares under this scheme. Employees, who joined Novartis after January 1, 2002, will participate in the new ESOP only.

All of the above mentioned share plans are wholly funded by a Novartis employee share participation foundation which is not consolidated.

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Movements in Novartis AG shares held by the Novartis employee share participation foundation were as follows:

	2002	2001	2000
	Number of shares	Number of shares	Number of shares
	(000)	(000)	(000)
January 1	101,312	98,000	89,720
Shares sold/bought	(5,238)	4,175	9,720
Shares distributed to employees	(1,002)	(863)	(1,440)
December 31	95,072	101,312	98,000

The market value of the Novartis AG shares held by the foundation at December 31, 2002 was CHF 4.8 billion (2001: CHF 6.1 billion).

27. Related parties

The Novartis Group has formed certain foundations with the purposes of advancing employee welfare, employee share participation, research and charitable contributions. The charitable foundations foster health care and social development in rural countries. The foundations are autonomous, and their boards are responsible for administering the foundations in accordance with the foundations' purpose and applicable law.

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The employee share participation foundation has not been included in the consolidated financial statements prepared under IAS as Interpretation No. 12 of the IAS Standing Interpretations Committee exempts post-employment and equity compensation plans from its scope. The total assets of this foundation as of December 31, 2002 included 95.1 million shares of Novartis AG with a market value of CHF 4.8 billion. As of December 31, 2001, the assets included 101.3 million Novartis shares with a market value of CHF 6.1 billion. This foundation is consolidated under US GAAP and is included as a reconciling item in the US GAAP reconciliation.

In 2002, the Group granted short-term loans totaling CHF 875 million to the above mentioned foundations and received short-term loans totaling CHF 3 million from them. In 2001, the Group granted short-term loans totaling CHF 1,189 million to the foundations, received short-term loans totaling CHF 10 million from them. In 2000, the Group granted short-term loans totaling CHF 936 million to the foundations, received short-term loans totaling CHF 6 million from them and sold 1.4 million Novartis shares to them at market prices.

In addition, there are approximately twenty other foundations that were established for charitable purposes that have not been consolidated, as the Group does not receive a benefit therefrom. As of December 31, 2002 these foundations held approximately 6.1 million shares of Novartis (2001: 6.2 million shares), with a cost of approximately CHF 39 million (2001: CHF 39 million).

See notes 5, 25 and 26 to the consolidated financial statements for disclosure of other related party transactions and balances.

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28. Commitments and contingencies

Spin-off of Novartis Agribusiness

In connection with the Agribusiness Master Agreement between Novartis AG and AstraZeneca Plc for the spin-off and merger of their respective agrochemical businesses into Syngenta AG due to time consuming legal requirements and administrative proceedings, there remain several assets which are not significant to the business of Novartis that have not been transferred as of December 31, 2002. All necessary administrative proceedings have been initiated and Novartis expects to complete all remaining transfers during 2003.

As an accommodation to permit an orderly separation of the businesses, Novartis and Syngenta, and their local subsidiaries, have agreed to continue to render each other specified services for an interim period. These services include support for human resources; health; safety and environment; insurance; legal and other functional areas. None of the services are significant to the business of Novartis.

Chiron Corporation

In connection with its original investment in Chiron, Novartis has agreed to:

purchase up to USD 500 million of new Chiron equity, at Chiron's request. To date, Chiron has made no such request.

guarantee up to USD 703 million of Chiron debt. Utilization of the guarantee in excess of USD 403 million reduces the equity put amount mentioned above. Novartis' obligation under the guarantee is only effective if Chiron defaults on the debt.

The outstanding equity put and guarantee expire no later than 2011.

Leasing commitments

Commitments arising from fixed-term operational leases in effect at December 31 are as follows:

	2002
	(CHF millions)
2003	259
2004	201
2005	154
2006	112

	2002
2007	95
Thereafter	492
Total	1,313
Expense of current year	284

The leasing expense from fixed term operational leases was CHF 284 million, CHF 204 million, and CHF 205 million for 2002, 2001, and 2000, respectively.

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Research & development commitments

The Group has entered into long-term research agreements with various institutions, including CHF 347 million of potential milestone and other contingent payments. As of December 31, 2002 they are as follows:

	2002
	(CHF millions)
2003	368
2004	221
2005	136
2006	115
2007	21
Thereafter	80
Total	941

Contingencies

Group companies have to observe the laws, government orders and regulations of the country in which they operate. A number of them are currently involved in administrative proceedings arising out of the normal conduct of their business. In the opinion of Group management, however, the outcome of the actions will not materially affect the Group's financial position, result of operations or cash flow.

The material components of the Group's potential environmental liability consist of a risk assessment based on investigation of the various sites identified by the Group as at risk for environmental exposure. The Group's future remediation expenses are affected by a number of uncertainties. These uncertainties include, but are not limited to, the method and extent of remediation, the percentage of material attributable to the Group at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties. The Group does not expect the resolution of such uncertainties to have a material effect on the consolidated financial statements.

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29. Principal currency translation rates

2002	2001	2000
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2002	2001	2000
(CHF)	(CHF)	(CHF)

Year end rates used for the consolidated balance sheets:

1 USD	1.40	1.68	1.64
1 EUR	1.46	1.48	1.52
1 GBP	2.25	2.43	2.45
100 JPY	1.17	1.28	1.43

Average rates of the year used for the consolidated income and cash flow statements:

1 USD	1.55	1.69	1.69
1 EUR	1.47	1.51	1.56
1 GBP	2.33	2.43	2.56
100 JPY	1.24	1.39	1.57

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30. Group subsidiaries and associated companies as at December 31, 2002

The following descriptions describe the various types of entities within the Group:

/*/ **Holding/Finance:** This entity is a holding company and/or performs finance functions for the Group.

* **Sales:** This entity performs sales and marketing activities for the Group.

/*/ **Production:** This entity performs manufacturing and/or production activities for the Group.

/*\ **Research:** The entity performs research and development activities for the Group.

	Equity Interest	Holding/ Finance	Sales	Production	Research
Argentina					
Novartis Argentina S.A., Buenos Aires	1		*	/*/	
Australia					
Novartis Australia Pty Ltd., North Ryde, NSW	1	/*/			
Novartis Pharmaceuticals Australia Pty Ltd., North Ryde, NSW	1		*		/*\
Novartis Consumer Health Australasia Pty Ltd., Rowville, Victoria	1		*	/*/	
Novartis Animal Health Australasia Pty Ltd., Pendle Hill, NSW	1		*		/*\
Austria					
Novartis Pharma GmbH, Vienna	1		*		
Novartis Forschungsinstitut GmbH, Vienna	1				/*\
Biochemie GmbH, Kundl	1	/*/	*	/*/	/*\
Novartis Animal Health GmbH, Kundl	1		*		
Bangladesh					
Novartis (Bangladesh) Limited, Dhaka	2		*	/*/	
Belgium					
N.V. Novartis Management Services S.A., Vilvoorde	1	/*/			
N.V. Novartis Pharma S.A., Vilvoorde	1		*		
N.V. Novartis Consumer Health S.A., Bruxelles	1		*		
N.V. CIBA Vision Benelux S.A., Mechelen	1		*		
Bermuda					
Triangle International Reinsurance Ltd., Hamilton	1	/*/			
Novartis Securities Investment Ltd., Hamilton	1	/*/			
Novartis International Pharmaceutical Ltd., Hamilton	1	/*/	*		

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	Equity Interest	Holding/ Finance	Sales	Production	Research
Brazil					
Novartis Biociências S.A., São Paulo	1		*	*/	
Novartis Saúde Animal Ltda., São Paulo	1		*	*/	
Canada					
Novartis Pharmaceuticals Canada Inc., Dorval/Montreal	1		*		/*\
Novartis Consumer Health Canada Inc., Mississauga, Ontario	1		*		
CIBA Vision Canada Inc., Mississauga, Ontario	1		*	*/	
Chile					
Novartis Chile S.A., Santiago de Chile	1		*		

1 = subsidiary; >90% of the voting rights fully consolidated

2 = subsidiary; above 50% and up to 90% of the voting rights fully consolidated

3 = investment in associated company; above 20% up to 50% of the voting rights equity method accounting

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	Equity Interest	Holding/ Finance	Sales	Production	Research
China					
Beijing Novartis Pharma Ltd., Beijing	2		*	*/	
Novartis Pharmaceuticals (HK) Limited, Hong Kong	1		*		
Shanghai Novartis Trading Ltd., Shanghai	1		*		
Colombia					
Novartis de Colombia S.A., Santafé de Bogotá	1		*	*/	
Costa Rica					
Novartis Consumer Health, S.A., San José	1		*	*/	
Czech Republic					
Novartis s.r.o., Prague	1		*		
Denmark					
Novartis Healthcare A/S, Copenhagen	1		*		
Ecuador					
Novartis Ecuador S.A., Quito	1		*		
Egypt					
Novartis Pharma S.A.E., Cairo	1			*/	
Novartis Egypt (Healthcare) S.A.E., Cairo	1		*		
Finland					
Novartis Finland Oy, Espoo	1		*		
France					
Novartis Groupe France S.A., Rueil-Malmaison	1	/**			
Novartis France S.A.S., Rueil-Malmaison	1	/**			
Novartis Pharma S.A.S., Rueil-Malmaison	1		*	*/	/**\
Novartis Ophthalmics S.A., Rueil-Malmaison	1		*		
GNR-pharma S.A., Levallois Perret	1		*		
Novartis Santé Familiale S.A., Revel	1		*	*/	
Novartis Santé Animale S.A., Rueil-Malmaison	1		*	*/	
Novartis Nutrition S.A.S., Revel	1		*	*/	
Nutrition et Santé S.A., Revel	1	/**	*	*/	/**\
CIBA Vision S.A., Blagnac	1		*		
Germany					
Novartis Deutschland GmbH, Wehr	1	/**			
Novartis Pharma GmbH, Nuremberg	1		*	*/	/**\
Azupharma GmbH & Co., Gerlingen near Stuttgart	1		*	*/	
BC Biochemie GmbH, Frankfurt am Main	1		*	*/	
Novartis Consumer Health GmbH, Munich	1		*	*/	/**\
Novartis Nutrition GmbH, Munich	1		*	*/	/**\
CIBA Vision Vertriebs GmbH, Grossostheim	1		*		
CIBA Vision GmbH, Grosswallstadt	1		*	*/	/**\

1 = subsidiary; >90% of the voting rights fully consolidated

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2 = subsidiary; above 50% and up to 90% of the voting rights fully consolidated

3 = investment in associated company; above 20% up to 50% of the voting rights equity method accounting

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	Equity Interest	Holding/ Finance	Sales	Production	Research
Great Britain					
Novartis UK Ltd., Farnborough	1	/*			
Novartis Pharmaceuticals UK Ltd., Frimley/Camberley	1		*	*/	/*\
Novartis Grimsby Ltd., Farnborough	1			*/	
Lagap Pharmaceuticals Ltd., Bordon	1		*		
Novartis Consumer Health UK Ltd., Horsham	1		*	*/	
Novartis Animal Health UK Ltd., Royston	1		*		/*\
Vericore Ltd., Royston	1		*	*/	
CIBA Vision (UK) Ltd., Southampton	1		*		
Greece					
Novartis (Hellas) S.A.C.I., Athens	1		*		
Hungary					
Novartis Hungary Healthcare Limited Liability Company, Budapest	1		*		
India					
Novartis India Limited, Mumbai	2		*	*/	
Novartis Enterprises Private Limited, Mumbai	1		*	*/	
Indonesia					
PT Novartis Biochemie, Jakarta	2		*	*/	
PT CIBA Vision Batam, Batam	1			*/	
Ireland					
Novartis Ireland Limited, Dublin	1		*		
Novartis Ringaskiddy Limited, Ringaskiddy, County Cork	1			*/	
Italy					
Novartis Farma S.p.A., Origgio	1	/*	*	*/	/*\
Biochemie S.p.A., Rovereto	1			*/	
Novartis Consumer Health S.p.A., Origgio	1		*		
CIBA Vision S.r.l., Marcon	1		*		
Japan					
Novartis Pharma K.K., Tokyo	1		*		/*\
Ciba-Geigy Japan Limited, Tokyo	1			*/	
CIBA Vision K.K., Tokyo	1		*		
Luxembourg					
Novartis Investments S.à.r.l., Luxembourg	1	/*			
Malaysia					
Novartis Corporation (Malaysia) Sdn. Bhd., Kuala Lumpur	2		*		
Mexico					
Novartis de México, S.A. de C.V., Mexico City	1	/*			
Novartis Farmacéutica, S.A. de C.V., Mexico City	1		*	*/	
Novartis Nutrition, S.A. de C.V., Mexico City	1		*		
Productos Gerber, S.A. de C.V., Mexico City	1		*	*/	

1 = subsidiary; >90% of the voting rights fully consolidated

2 = subsidiary; above 50% and up to 90% of the voting rights fully consolidated

3 = investment in associated company; above 20% up to 50% of the voting rights equity method accounting

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	Equity Interest	Holding/ Finance	Sales	Production	Research
Netherlands					
Novartis Netherlands B.V., Amsterdam	1	/*			
Novartis Pharma B.V., Arnhem	1		*		

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	Equity Interest	Holding/ Finance	Sales	Production	Research
Multipharma B.V., Weesp	1		*	*/	
Novartis Consumer Health B.V., Breda	1		*	*/	
Netherlands Antilles					
Biochemie West Indies N.V., Curaçao	1	/*/	*		
New Zealand					
Novartis New Zealand Ltd., Auckland	1		*		
Norway					
Novartis Norge AS, Oslo	1		*		
Pakistan					
Novartis Pharma (Pakistan) Limited, Karachi	1		*	*/	
Panama					
Novartis Pharma (Logistics), Inc., Panama	1		*		
Peru					
Novartis Biosciences Perú S.A., Lima	1		*		
Philippines					
Novartis Healthcare Philippines, Inc., Makati/Manila	1		*		
Poland					
Novartis Poland Sp. z o.o., Warsaw	1		*		
Alima-Gerber S.A., Warsaw	1		*	*/	
Portugal					
Novartis Portugal SGPS Lda., Sintra	1	/*/			
Novartis Farma Produtos Farmacêuticos S.A., Sintra	1		*		
Novartis Consumer Health Produtos Farmacêuticos e Nutrição Lda., Lisbon	1		*		
Puerto Rico					
Gerber Products Company of Puerto Rico, Inc., Carolina	1		*	*/	
CIBA Vision Puerto Rico, Inc., Cidra	1			*/	
Russian Federation					
Novartis Pharma ZAO, Moscow	1		*		
Singapore					
Novartis Institute for Tropical Diseases Pte. Ltd., Singapore	1				/*\
Slovenia					
Lek Pharmaceuticals d.d., Ljubljana	1	/*/	*	*/	/*\

1 = subsidiary; >90% of the voting rights fully consolidated

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3 = investment in associated company; above 20% up to 50% of the voting rights equity method accounting

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	Equity Interest	Holding/ Finance	Sales	Production	Research
South Africa					
Novartis South Africa (Pty) Ltd., Spartan/Johannesburg	1		*	*/	
South Korea					
Novartis Korea Ltd., Seoul	1		*	*/	
Spain					
Novartis Farmacéutica, S.A., Barcelona	1	/*/	*	*/	
Biochemie, S.A., Les Franqueses del Vallés/Barcelona	1		*	*/	/*\
Novartis Consumer Health, S.A., Barcelona	1		*	*/	
Sweden					
Novartis Sverige Participations AB, Täby/Stockholm	1	/*/			
Novartis Sverige AB, Täby/Stockholm	1		*		
CIBA Vision Nordic AB, Askim/Göteborg	1		*		
Switzerland					
Novartis International AG, Basel	1	/*/			
Novartis Holding AG, Basel	1	/*/			
Novartis Securities AG, Basel	1	/*/			
Novartis Research Foundation, Basel	1				/*\

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	Equity Interest	Holding/ Finance	Sales	Production	Research
Novartis Foundation for Management Development, Basel	1	/*/			
Roche Holding AG, Basel	3	/*/	*	*/	/*\
Novartis Pharma AG, Basel	1	/*/	*	*/	/*\
Novartis Ophthalmics AG, Hettlingen	1	/*/	*	*/	/*\
Novartis Pharma Services AG, Basel	1		*		
Novartis Pharma Schweizerhalle AG, Schweizerhalle	1			*/	
Novartis Pharma Stein AG, Stein	1			*/	/*\
Novartis Pharma Schweiz AG, Bern	1		*		
Novartis Consumer Health S.A., Nyon	1	/*/	*	*/	/*\
Novartis Consumer Health International S.A., Nyon	1		*		
Novartis Consumer Health Schweiz AG, Bern	1		*		
Novartis Animal Health AG, Basel	1	/*/	*	*/	/*\
Novartis Centre de Recherche Santé Animale S.A., St.Aubin	1				/*\
Novartis Nutrition AG, Bern	1	/*/			
CIBA Vision AG, Embrach	1	/*/	*		
Taiwan					
Novartis (Taiwan) Co., Ltd., Taipei	1		*	*/	
Thailand					
Novartis (Thailand) Limited, Bangkok	1		*		
Turkey					
Novartis Saglik, Gıda ve Tarım Ürünleri Sanayi ve Ticaret A.S., Istanbul	1		*	*/	

1 = subsidiary; >90% of the voting rights fully consolidated

2 = subsidiary; above 50% and up to 90% of the voting rights fully consolidated

3 = investment in associated company; above 20% up to 50% of the voting rights equity method accounting

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	Equity Interest	Holding/ Finance	Sales	Production	Research
USA					
Novartis Corporation, Florham Park, NJ	1	/*/			
Novartis Finance Corporation, New York, NY	1	/*/			
Novartis Pharmaceuticals Corporation, East Hanover, NJ	1		*	*/	/*\
Novartis Ophthalmics, Inc., Duluth, GA	1		*	*/	
Novartis Institutes for BioMedical Research, Inc., Cambridge, MA	1				/*\
Novartis Institute for Functional Genomics, Inc., San Diego, CA	1				/*\
Genetic Therapy, Inc., Gaithersburg, MD	1				/*\
Chiron Corporation, Emeryville, CA	3	/*/	*	*/	/*\
Geneva Pharmaceuticals, Inc., Princeton, NJ	1		*	*/	/*\
Biochemie US, Inc., Broomfield, CO	1		*		
Novartis Consumer Health, Inc., Parsippany, NJ	1		*	*/	/*\
Novartis Animal Health US, Inc., Greensboro, NC	1		*	*/	/*\
Novartis Animal Vaccines US, Inc., Overland Park, KS	1		*	*/	/*\
Novartis Nutrition Corporation, Minneapolis, MN	1		*	*/	/*\
Gerber Products Company, Fremont, MI	1	/*/	*	*/	/*\
Gerber Life Insurance Company, White Plains, NY	1		*		
CIBA Vision Corporation, Duluth, GA	1	/*/	*	*/	/*\
Venezuela					
Novartis de Venezuela, S.A., Caracas	1		*		
Novartis Nutrition de Venezuela, S.A., Caracas	1		*	*/	

In addition, the Group is represented by subsidiaries, associated companies or joint ventures in the following countries:

Algeria, British Virgin Islands, Croatia, Dominican Republic, Guatemala, the former Yugoslav Republic of Macedonia, Morocco, Nigeria, Romania, Uruguay and Yugoslavia.

- 1 = subsidiary; >90% of the voting rights fully consolidated
- 2 = subsidiary; above 50% and up to 90% of the voting rights fully consolidated
- 3 = investment in associated company; above 20% up to 50% of the voting rights equity method accounting

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31. Significant Differences Between IAS and United States Generally Accepted Accounting Principles (US GAAP)

The Group's consolidated financial statements have been prepared in accordance with IAS, which as applied by the Group, differs in certain significant respects from US GAAP. The effects of the application of US GAAP to net income and equity are set out in the tables below:

Notes	2002	2002	2001	2000
	(\$ millions) ⁽¹⁾	(CHF millions)	(CHF millions)	(CHF millions)
Net income under IAS	5,224	7,313	7,024	7,210
US GAAP adjustments:				
Purchase accounting: Ciba-Geigy	a	(326)	(456)	(426)
Purchase accounting: other acquisitions	b	(330)	(462)	(232)
Purchase accounting: IAS goodwill amortization	c	156	218	
Restructuring costs	d			(72)
Available-for-sale securities and derivative financial instruments	e	(302)	(423)	787
Pension provisions	f	27	38	43
Share-based compensation	g	(132)	(185)	(168)
Consolidation of share-based employee compensation foundations	h	(22)	(31)	(21)
Deferred taxes	i	(104)	(145)	(23)
In-process research and development	j	(11)	(16)	(936)
Other	k	(118)	(165)	28
Deferred tax effect on US GAAP adjustments		156	219	114
				(75)
Net income under US GAAP	4,218	5,905	4,703	6,913
Basic earnings per share under US GAAP (CHF)	1.74	2.44	1.90	2.74
Diluted earnings per share under US GAAP (CHF)	1.71	2.39	1.90	2.74

(1)

The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

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Notes	December 31, 2002	December 31, 2002	December 31, 2001
	(\$ millions) ⁽¹⁾	(CHF millions)	(CHF millions)
Equity under IAS	28,344	39,682	42,245
US GAAP adjustments:			
Purchase accounting: Ciba-Geigy	a 3,121	4,370	4,826
Purchase accounting: other acquisitions	b 3,022	4,230	5,549
Purchase accounting: IAS goodwill amortization	c 156	218	
Pensions provisions	f 1,077	1,507	1,431
Share-based compensation	g (157)	(220)	(58)
Consolidation of share-based employee compensation foundation	h (490)	(686)	(939)
Deferred taxes	i (546)	(765)	(621)
In-process research and development	j (986)	(1,380)	(1,392)
Other	k (36)	(50)	102
Deferred tax effect on US GAAP adjustments	(186)	(260)	(396)
Equity under US GAAP	33,319	46,646	50,747

(1) Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

Components of equity in accordance with US GAAP

	December 31, 2002	December 31, 2002	December 31, 2001
	(\$ millions) ⁽¹⁾	(CHF millions)	(CHF millions)
Share capital	1,009	1,412	1,443
Treasury shares, at nominal value	(159)	(223)	(220)
Share premium	1,123	1,572	1,338
Retained earnings	33,169	46,436	47,422
Accumulated other comprehensive income:			
Currency translation adjustment	(1,593)	(2,230)	46
Unrealized market value adjustment on available-for-sale securities, net of taxes of CHF (8) million (2001: 115 million)	(359)	(502)	738
Unrealized market value adjustment on cash-flow hedges net of taxes of CHF 42 million (2001: CHF 24 million)	129	181	(20)
December 31	33,319	46,646	50,747

(1) The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The

translations are unaudited.

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Changes in US GAAP equity

	(\$ millions) ⁽¹⁾	(CHF millions)
January 1, 2000	36,125	50,575
Net income for the year under US GAAP	4,938	6,913
Dividends paid	(1,474)	(2,064)
Net unrealized market value adjustment	612	857
Increase in share premium related to share-based compensation	52	73
Foreign currency translation adjustment	(375)	(525)
Acquisition of treasury shares	(1,256)	(1,758)
Effect of Agribusiness spin off	(3,763)	(5,269)
January 1, 2001	34,859	48,802
Changes in accounting policy on cash flow hedges (CHF 138 million before taxes)	75	105
Net income for the year under US GAAP	3,359	4,703
Dividends paid	(1,567)	(2,194)
Net unrealized market value adjustment	(319)	(446)
Increase in share premium related to share-based compensation	33	46
Foreign currency translation adjustment	(196)	(275)
Acquisition of treasury shares	(2,861)	(4,005)
Issue of call and put options on Novartis shares	2,865	4,011
January 1, 2002	36,248	50,747
Net income for the year under US GAAP	4,218	5,905
Dividends paid	(1,576)	(2,207)
Net unrealized market value adjustment	(572)	(801)
Increase in share premium related to share-based compensation	17	24
Foreign currency translation adjustment	(1,601)	(2,241)
Associated companies' equity movement	(104)	(146)
Acquisition of treasury shares	(3,311)	(4,635)
December 31, 2002	33,319	46,646

(1)

The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

Discontinued Operations

Under IAS 35, the disposal of the Agribusiness sector was considered a discontinued operation as of December 1, 1999, when the Board of Novartis approved the divestment. However under U.S. GAAP, the disposal did not qualify as a discontinued operation until the shareholders of Novartis approved the required transactions on October 11, 2000.

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The income from continuing and discontinued Agribusiness operations under U.S. GAAP as of December 31, 2002, 2001, and 2000, respectively is as follows:

	<u>2002⁽¹⁾</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
	(\$ millions)	(CHF millions)	(CHF millions)	(CHF millions)
Income from continuing operations under U.S. GAAP	4,218	5,905	4,703	6,346
Income from discontinued operations under U.S. GAAP (net of taxes of CHF 314 million in 2000)				567
Net income reported under U.S. GAAP	4,218	5,905	4,703	6,913

	<u>2002⁽¹⁾</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
	(\$)	(CHF)	(CHF)	(CHF)
Earnings per share				
Basic:				
Income from continuing operations under U.S. GAAP	1.74	2.44	1.90	2.52
Income from discontinued operations under U.S. GAAP				0.22
Basic earnings per share under U.S. GAAP	1.74	2.44	1.90	2.74
Diluted:				
Income from continuing operations under U.S. GAAP	1.71	2.39	1.90	2.52
Income from discontinued operations under U.S. GAAP				0.22
Diluted earnings per share under U.S. GAAP	1.71	2.39	1.90	2.74

(1) The Swiss franc amounts have been translated into United States dollars at the rate of 1.40 to the dollar. Such translations should not be construed as representations that the Swiss franc amounts represent, or have been or could be converted into, United States dollars at that or any other rate. The translations are unaudited.

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(a) Purchase accounting: Ciba-Geigy

The accounting treatment for the 1996 merger of Sandoz and Ciba-Geigy under IAS is different from the accounting treatment under US GAAP. For IAS purposes the merger was accounted for as a uniting of interests, however, for US GAAP the merger did not meet all of the required conditions of Accounting Principles Board Opinion No. 16 for a pooling of interests and therefore is accounted for as a purchase under US GAAP. Under US GAAP, Sandoz would be deemed to be the acquirer with the assets and liabilities of Ciba-Geigy being recorded at their estimated fair values and the results of Ciba-Geigy being included from December 20, 1996. Under US GAAP, the cost of Ciba-Geigy to Sandoz was approximately CHF 38.1 billion. All of the purchase price was allocated to identified tangible and intangible assets with a definite useful life. There was therefore no residual goodwill arising from accounting for this transaction.

The components of the equity and income statement adjustments related to the US GAAP purchase accounting adjustment for 2002 and 2001 are as follows:

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	2002		2001		2000	
	Components to reconcile		Components to reconcile		Components to reconcile	
	Net income	Equity	Net income	Equity	Net income	Equity
	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)
Intangible assets related to marketed products	(642)	5,795	(429)	6,437	(528)	6,865
Tangible fixed assets	69	(960)	69	(1,029)	79	(1,098)
Inventory		711		711	(19)	711
Other identifiable intangibles	(32)	125	(32)	157	(60)	188
Investments		169	(34)	169	(34)	202
Deferred taxes	149	(1,470)	105	(1,619)	136	(1,721)
Total adjustment	(456)	4,370	(321)	4,826	(426)	5,147

The intangible assets related to marketed products and other identifiable intangibles are being amortized over 15 and 10 years, respectively.

(b) Purchase accounting: other acquisitions

Prior to January 1, 1995, the Group wrote off all goodwill, being the difference between the purchase price and the aggregate fair value of tangible and intangible assets and liabilities acquired in a business combination, directly to equity, in accordance with IAS existing at that time. The adoption of IAS 22 (revised 1993) required that goodwill be capitalized and amortized, however, did not require prior period restatement. The material component of goodwill recorded directly to equity, under IAS prior to January 1, 1995, related to the acquisition of Gerber Products in 1994. The net book value of goodwill under US GAAP attributable to Gerber Products was CHF 4,026 million and CHF 4,815 million as of December 31, 2002 and 2001, respectively.

In accordance with IAS 22, the difference between the purchase price and the aggregate fair value of tangible and intangible assets and liabilities acquired in a business combination is capitalized as goodwill and amortized over its useful life, not to exceed 20 years. Under US GAAP, the difference between the

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purchase price and fair value of net assets acquired as part of a pre-1995 business combination is also capitalized as goodwill. Effective January 1, 2002, the Group adopted Statement of Financial Accounting Standards No. 142 (SFAS 142), "Goodwill and other Intangible Assets". SFAS 142 requires that all goodwill and other intangible assets existing on implementation on January 1, 2002 be tested for impairment and thereafter be assessed for impairment on an annual basis. From January 1, 2002 goodwill and intangible assets deemed to have an indefinite useful life are no longer amortized on a regular basis. For the purpose of the reconciliation to US GAAP, goodwill was generally amortized through the income statement over an estimated useful life of 20 years up to December 31, 2001. Therefore, there was no amortization charge in 2002 under US GAAP.

However, as a result of the decision to divest certain products and adverse changes in the operating environment of certain businesses, in accordance with SFAS 142, non-cash charges of CHF 355 million were recorded in 2002 for impairments of goodwill and divestments. Also included are US GAAP adjustments to the equity method accounting results of Roche and Chiron totaling CHF 107 million. The impact of the additional impairment charges and the Roche and Chiron adjustments resulted in a CHF 462 million charge in 2002.

Note I(xi) provides further disclosure regarding impairment under US GAAP.

The expense of CHF 279 million recorded in 2001 relates to goodwill amortization under US GAAP.

(c) Purchase accounting: IAS goodwill amortization

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As described above, goodwill is no longer amortized but only subject to impairment testing under US GAAP as of January 1, 2002. The corresponding reversal of the regular goodwill amortization under IAS resulted in an additional income in the US GAAP reconciliation of CHF 218 million for 2002.

(d) *Restructuring costs*

Under IAS, restructuring charges are accrued against operating income in the period management commits itself to a plan, it is probable a liability has been incurred and the amount can be reasonably estimated. Up to January 1, 2000 US GAAP was more prescriptive than IAS; for example, in order to qualify as restructuring costs under US GAAP, it was necessary that employees were informed regarding the key provisions of the restructuring plan prior to the end of the reporting period. Also, there was a rebuttable presumption under US GAAP that an exit plan would be completed and the exit costs incurred within one year from the commitment date. Therefore, certain costs permitted to be accrued under IAS up to January 1, 2000 were not allowable under US GAAP resulting in an additional US GAAP expense in 2000 of CHF 72 million. There was no measurement difference in 2002 and 2001.

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The following schedule reconciles restructuring accruals under IAS to amounts determined under US GAAP.

	2002	2001
	(CHF millions)	(CHF millions)
Total accruals in accordance with IAS	137	236
Reclassification of restructuring accruals to tangible fixed assets	(21)	(52)
Restructuring accruals in accordance with US GAAP	116	184

Restructuring accruals according to US GAAP are comprised of the following:

	2002	2001
	(CHF millions)	(CHF millions)
Employee termination costs	65	59
Other third party costs	51	125
Restructuring accruals in accordance with US GAAP	116	184

(e) *Available-for-sale marketable securities and derivative financial instruments*

Prior to the adoption of IAS 39 from January 1, 2001 in the IAS consolidated financial statements, investments were stated at the lower of cost or market value on an individual basis. Any losses resulting from the application of the lower of cost or market valuation was charged to the income statement. The Group's application of IAS 39 from January 1, 2001 is now consistent with US GAAP. Investments classified as available-for-sale are carried at fair value, with any unrealized gain or loss recorded as a separate component of equity. Under US GAAP, the policy of recording in a separate component of equity unrealized gains or losses on available-for-sale marketable securities has been applied for a number of years. This results in a different amount of unrealized gains or losses being recorded in the separate component of equity under US GAAP compared to IAS and an additional expense under US GAAP on disposal of available-for-sale securities during 2002 and 2001.

Under US GAAP for all years presented, the Group values all of its derivative financial instruments, except those related to cash flow hedges, that do not qualify for hedge accounting to fair value on an individual basis through the income statement. Concerning cash flow hedges, SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities" adopted from January 1, 2001 requires all derivative instruments including cash flow hedges be recorded on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive income. This resulted in the Group recording a net of tax cumulative-effect-type gain of CHF 105 million as of January 1, 2001 in accumulated other comprehensive income to recognize at fair value all derivative instruments that are designated as cash flow hedging instruments.

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Prior to the adoption of IAS 39 on January 1, 2001 under IAS, the Group used the concept of portfolio valuation for its derivative financial instruments and only recorded net losses on portfolios of similar derivative financial instruments through the income statement, except for items that qualified for

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hedge accounting. Unrealized gains were not recorded. This also resulted in a difference between the IAS and US GAAP income statements in 2001 due to recognition of gains or losses in different periods.

The above differences result in an additional US GAAP expense of CHF 423 million in 2002 (2001: CHF 511 million expense; 2000: CHF 787 million income).

At December 31, 2002 and 2001 the balance sheet values of all available-for-sale marketable securities and derivative financial instruments under IAS and US GAAP were the same.

(f) Pension provisions

Under IAS, pension costs and similar obligations are accounted for in accordance with IAS 19, "Employee Benefits". For purposes of US GAAP, pension costs for defined benefit plans are accounted for in accordance with SFAS 87 "Employers' Accounting for Pensions" and the disclosure is presented in accordance with SFAS 132 "Employers' Disclosures about Pensions and Other Post-retirement Benefits". The version of IAS 19 in force up to December 31, 1998 required that the discount rate used in the calculation of benefit plan obligations was of an average long-term nature, whereas US GAAP required that the discount rate is based on a rate at which the obligations could be currently settled. From January 1, 1999, IAS and US GAAP accounting rules in this area are essentially the same, however, adjustments arise when reconciling from IAS to US GAAP due to the pre-1999 accounting rule differences.

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The following is a reconciliation of the balance sheet and income statement amounts recognized for IAS and US GAAP for both pension and post-employment benefit plans:

	2002	2001	2000
	(CHF millions)	(CHF millions)	(CHF millions)
Pension benefits:			
Prepaid asset recognized for IAS	3,909	3,740	3,218
Difference in unrecognized amounts	1,681	1,637	1,874
Prepaid asset recognized for US GAAP	5,590	5,377	5,092
Net periodic income recognized for IAS	195	345	348
Amortization of transition asset			88
Difference in amortization of actuarial amounts	27	(237)	(78)
Net periodic pension benefit income recognized for US GAAP	222	108	358
Other post-employment benefits:			
Liability recognized for IAS	(591)	(698)	(676)
Difference in unrecognized amounts	(174)	(206)	(144)
Liability recognized for US GAAP	(765)	(904)	(820)

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	2002	2001	2000
Net periodic benefit cost recognized for IAS	(75)	(72)	(77)
Amortization of actuarial amounts	11	(73)	33
Net periodic employment benefit costs recognized for US GAAP	(64)	(145)	(44)
Total US GAAP income statement difference on pensions and other post-employment benefits	38	(310)	43

(g) *Share-based compensation*

The Group does not account for share-based compensation, as it is not required under IAS. Under US GAAP, the Group applies Accounting Principles Board Opinion No. 25 (APB 25) "Accounting for Stock Issued to Employees" and related interpretations in accounting for its plans. As described in Note 26, the Group has several plans that are subject to measurement under APB 25. These include the Novartis Share Option Plan, Long-Term Performance Plan, the Leveraged Share Savings Plan, the other Management Share Plans, the old and new Swiss Employee Share Ownership Plans and the US Management ADS Appreciation Cash Plan.

The Novartis Non-US Share Option Plan from 2001 is considered to be a fixed plan under APB 25 as the number of shares and all other parameters are known on the grant date which is therefore the measurement date. In prior years this was considered to be a variable plan, and until all parameters were fixed, the compensation expense was recorded at the balance sheet date by estimating the ultimate number of shares to be issued multiplied by the spread between the share price on the balance sheet date and the strike price. There was no compensation expense in 2002 and 2001 (2000: CHF 11 million) since

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the grant date and measurement date are now the same and the strike price at that date was greater than the market price.

Compensation expense recognized under the Long-Term Performance Plan was CHF 22 million for the year ended December 31, 2002 (2001: CHF 11 million; 2000: CHF 5 million).

The Leveraged Share Savings Plan is considered to be compensatory based on the fair value of the allocated Novartis shares. The shares are blocked for a five year period at which time the bonus taken in shares are matched on a one-for-one basis. Compensation expense recognized under this plan was CHF 17 million for 2002 (2001: CHF 17 million).

The other Management Share Plans are considered to be compensatory based on the strike price for the underlying instruments, which is zero at the date of grant. Compensation expense is recorded at the grant date and is calculated as the number of instruments granted, multiplied by the share price on that date. Compensation expense recognized under these plans was CHF 6 million for the year ended December 31, 2002 (2001: CHF 1 million; 2000: CHF 3 million).

The new Swiss Employee Share Ownership Plan (ESOP) is considered to be compensatory based on the fair value of Novartis AG shares at a fixed date. Compensation expense recognized under this plan was CHF 123 million for the year ended December 31, 2002.

The old Swiss ESOP is considered to be compensatory based on the amount of the discount allowed for employee share purchases. Compensation expense is recorded at the grant date and is calculated as the spread between the share price and the strike price on that date. During 2002, the Group sold 406,448 shares (2001: 862,720 shares, 2000: 1,429,520 shares) to employees for CHF 5 million (2001: CHF 11 million, 2000: CHF 18 million). Compensation expense for 2002 recognized under the Ownership plan was CHF 20 million (2001: CHF 46 million and 2000: CHF 72 million). The discount to the Group's share price was recorded in share premium. The percentage discount to the Group's share price under this plan was 75% in 2002 (2001: 88%, 2000: 83%). 2002 was the last year in which employees could purchase shares under this scheme. Employees, who join Novartis after January 1, 2002, will participate in the new ESOP only.

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The US Management ADS Appreciation Cash Plan is considered to be variable because the final benefit to employees depends on the Group's share price at the exercise date. Compensation expense is recorded at each balance sheet date by estimating the number of rights outstanding multiplied by the spread between the share price on the balance sheet date and the strike price. Reduction in compensation expense and the release of the accrual for this plan was CHF 3 million for 2002 (2001: CHF 37 million). Compensation expense and the increase of the accrual under the Appreciation plan were CHF 77 million in 2000. This plan was supplemented in 2001 by the US ADS Incentive Plan.

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The total US GAAP expense of the above items is as follows:

	2002	2001	2000
	(CHF millions)	(CHF millions)	(CHF millions)
Novartis Share Option plan			11
Long-term performance plan	22	11	5
Leveraged Share Savings plan	17	17	
Other Management Share plans	6	1	3
New Swiss ESOP plan	123		
Old Swiss ESOP plan	20	46	72
ADS Appreciation Cash plan	(3)	(37)	77
Total US GAAP additional compensation expense	185	38	168

(h) Consolidation of share-based compensation foundation

The Group has an employee share participation foundation that settles the obligations of the Group's share-based compensation plans that is not required to be consolidated for IAS. However, this foundation is consolidated under US GAAP.

The impact of consolidating this foundation is to reduce net income by CHF 31 million, CHF 37 million and CHF 21 million in 2002, 2001 and 2000, respectively. US GAAP equity at December 31, 2002 and 2001 decreases by CHF 686 million and CHF 939 million, respectively.

(i) Deferred taxes

Under IAS 12 (revised) and US GAAP, unrealized profits resulting from intercompany transactions are eliminated from the carrying amount of assets, such as inventory. In accordance with IAS 12 (revised) the Group calculates the tax effect with reference to the local tax rate of the company that holds the inventory (the buyer) at period-end. However, US GAAP requires the tax effect to be calculated with reference to the local tax rate in the seller's or manufacturer's jurisdiction.

(j) In-process research and development (IPR&D)

IAS does not consider that IPR&D is an intangible asset that can be separated from goodwill. Under US GAAP it is considered to be a separate asset that needs to be written-off immediately following the acquisition as the feasibility of the acquired research and development has not been fully tested and the technology has no alternative future use.

During 2002 IPR&D has been identified for US GAAP purposes in connection with acquisitions, principally the acquisition of a further 11.4% of the voting shares of Roche and of 99% of the shares of Lek.

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A fair value determination of Roche was used to determine the CHF 191 million of IPR&D which was expensed immediately. The independent appraisers used an excess earnings model and relied upon publicly available information from equity analyst reports. An excess

earnings model captures the future cash flows attributable to the asset.

Because the Lek transaction closed and was effective near the end of 2002, an estimated CHF 130 million of IPR&D was expensed immediately. Based on a preliminary evaluation of available information, this represents the best estimate. Management's evaluation along with the fair value determination by independence appraisers, scheduled for completion in the first quarter of 2003, could result in an adjustment to this estimate.

IPR&D recognized on other acquisitions amounted to CHF 25 million in 2002.

The income booked for the reversal of the amortization of IPR&D recorded under IAS as a component of goodwill amortization amounted to CHF 330 million in 2002. During 2000, IPR&D was identified for US GAAP purposes in connection with acquisitions, principally Wesley Jessen. During 2001 IPR&D arose principally on the acquisition of the Roche voting shares (CHF 356 million) and the purchase of pitavastatin marketing rights (CHF 506 million).

The total net IPR&D expense for 2002 was CHF 16 million (2001: CHF 936 million; 2000: CHF 143 million).

The impact of IPR&D reduced US GAAP equity by CHF 1,380 million and CHF 1,392 million at December 31, 2002 and 2001, respectively.

(k) Other

There are also differences between IAS and US GAAP in relation to (1) capitalized interest and capitalized software, (2) accretion on convertible debentures, and (3) LIFO inventory. None of these differences are individually significant and they are therefore shown as a combined total.

(l) Additional US GAAP disclosures

i) Financial assets and liabilities

Apart from the following exceptions, the US GAAP carrying value of financial assets and liabilities is equal to the IAS carrying values.

ii) Cash, cash equivalents and time deposits

	2002	2001
	(CHF millions)	(CHF millions)
Carrying value of cash and cash equivalents under IAS	8,138	11,147
Carrying values of time deposits under IAS (Note 16)	1,076	2,689
Change due to consolidation of share-based compensation foundation under US GAAP	(872)	(1,137)
Total under US GAAP	8,342	12,699

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iii) Marketable securities

	2002	2001
	(CHF millions)	(CHF millions)
Carrying values of marketable securities under IAS (Note 16)	7,715	8,008
Carrying values of other investments under IAS	1,257	1,755
	181	196

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	2002	2001
Marketable securities in share-based compensation foundation consolidated under US GAAP		
Total under US GAAP	9,153	9,959

The components of available-for-sale marketable securities under US GAAP at December 31, 2002 and 2001 are the following:

	Cost	Gross unrealized gains	Gross unrealized losses	Carrying value and estimated fair value
	(CHF millions)	(CHF millions)	(CHF millions)	(CHF millions)
As of December 31, 2002				
<i>Available-for-sale securities:</i>				
Equity securities	2,838	297	(801)	2,334
Debt securities	6,733	128	(42)	6,819
Total	9,571	425	(843)	9,153
As of December 31, 2001				
<i>Available-for-sale securities:</i>				
Equity securities	4,084	941	(458)	4,567
Debt securities	5,430	70	(108)	5,392
Total	9,514	1,011	(566)	9,959

Proceeds from sales of available-for-sale securities were CHF 9,433 million and CHF 9,482 million in 2002 and 2001, respectively. Gross realized gains were CHF 412 million and CHF 795 million on those sales in 2002 and 2001, respectively. Gross realized losses were CHF 1,004 million and CHF 170 million on those sales in 2002 and 2001, respectively. The cost used to determine the gain or loss on these sales was calculated using the weighted average method.

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The maturities of the available-for-sale debt securities included above at December 31, 2002 are as follows:

	2002
	(CHF millions)
Within one year	139
Over one year through five years	5,488
Over five years through ten years	413
Over ten years	779
Total	6,819

iv) *Derivative financial instruments*

Prior to the adoption of IAS 39 from January 1, 2001, under IAS, the Group used the concept of portfolio valuation for derivative financial instruments. For each portfolio of similar instruments the net unrealized holding gain or loss was determined by netting unrealized holding gains and losses on each instrument in the portfolio. The Group's application of IAS 39 from January 1, 2001 is now consistent with US GAAP. Under US GAAP for all years presented, the Group marks all of its derivative financial instruments except those related to cash flow hedges that do not qualify for hedge accounting, to fair value on an individual basis through the income statement and thus their carrying value is equal to their fair value. This produced the following differences between IAS and US GAAP for periods prior to the adoption of IAS 39 on January 1, 2001:

Realized and unrealized gains and losses on equity options designated as a hedge of available-for-sale securities were deferred in other comprehensive income until the underlying security was disposed of, at which time they were included with the related capital gain or loss.

When a hedging instrument expired or was sold, or when a hedge no longer met the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remained in equity and was recognized when the committed or forecasted transaction was ultimately recognized in the income statement or when the underlying available-for-sale security was disposed of. However, if a committed or forecasted transaction was no longer expected to occur, the cumulative gain or loss that was reported in equity was immediately transferred to the income statement.

From January 1, 2001, the Group adopted SFAS 133 "*Accounting for Derivative Instruments and Hedging Activities*" which as applied by the Group is consistent with IAS 39 as regards accounting for cash flow hedges.

Total gains recognized in 2002 in accordance with US GAAP on options settled in Novartis shares that require a net cash settlement were CHF 190 million (2001: CHF 387 million of losses).

v) *Non-derivative financial instruments*

The US GAAP carrying values are equivalent to the IAS carrying values for all non-derivative financial assets and liabilities. Non-derivative financial assets consist of cash and cash equivalents, time deposits, and marketable securities. Non-derivative liabilities consist of commercial paper, bank or other short-term financial debts, and long-term debt.

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The carrying amount of cash and cash equivalents, time deposits, commercial paper, and bank and other short-term financial debts approximates their estimated fair values due to the short-term nature of these instruments. The fair values of marketable securities are estimated based on listed market prices or broker or dealer price quotes. The fair value of long-term debt is estimated based on the current quoted market rates available for debt with similar terms and maturities.

The estimated fair values of the long and short-term financial debt are provided in notes 18 and 20 to the IAS consolidated financial statements.

vi) *Earnings per share*

As discussed in item (h) above, in the past, the Group established a Novartis employee share participation foundation to assist the Group in meeting its obligations under various employee benefit plans and programs. This foundation supports existing, previously approved employee benefit plans.

For US GAAP purposes, the Group consolidates the Novartis employee share participation foundation. The cost of Novartis AG shares held by the foundation is shown as a reduction of shareholders' equity in the Group's balance sheet.

Any dividend transactions between the Group and the foundation are eliminated, and the difference between the fair value of the shares on the date of contribution to the foundation and the fair values of the shares at December 31, is included in consolidated retained earnings. Shares held in the foundation

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are not considered outstanding in the computation of US GAAP earnings per share. The consolidation of this entity had the following impact on basic and diluted earnings per share:

	2002	2001	2000
Net income under US GAAP (CHF millions)	5,905	4,703	6,913
Weighted average number of shares in issue under IAS	2,515,311,685	2,571,673,365	2,613,547,597
Weighted average treasury shares due to consolidation of the employee share participation foundation under US GAAP	(97,164,490)	(100,569,059)	(93,783,600)
Weighted average number of shares in issue under US GAAP	2,418,147,195	2,471,104,306	2,519,763,997
Basic earnings per share under US GAAP (CHF)	2.44	1.90	2.74
	2002	2001	2000
Net income under US GAAP (CHF millions)	5,905	4,703	6,913
Elimination of interest expense on convertible debt (net of tax effect)	3	20	20
Net income used to determine diluted earnings per share	5,908	4,723	6,933
Weighted average number of shares in issue under IAS	2,515,311,685	2,571,673,365	2,613,547,597
Adjustment for assumed conversion of convertible debt		9,478,158	8,838,879
Call options on Novartis shares	54,891,036	4,574,401	
Adjustment for other dilutive share options	2,264,236	1,010,963	982,560
Weighted average number of treasury shares due to consolidation of the employee share participation foundation under US GAAP	(97,164,490)	(100,569,059)	(93,783,600)
Weighted average number of shares for diluted earnings per share under US GAAP	2,475,302,467	2,486,167,828	2,529,585,436
Diluted earnings per share under US GAAP (CHF)	2.39	1.90	2.74

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vii) Pro forma earnings per share

Statement of Financial Accounting Standards No. 123 (SFAS 123) "Accounting for Stock-Based Compensation" established accounting and disclosure requirements using a fair-value based method of accounting for share-based employee compensation. Had the Group accounted for share options in accordance with SFAS 123, net income and earnings per share would have been the pro forma amounts indicated below:

	2002	2001	2000
Net income under US GAAP (CHF millions):			
As reported	5,905	4,703	6,913
Pro forma	5,760	4,664	6,884
Earnings per share (CHF):			
As reported:			
Basic	2.44	1.90	2.74

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	2002	2001	2000
Diluted	2.39	1.90	2.74
Pro forma:			
Basic	2.38	1.89	2.73
Diluted	2.33	1.88	2.73

The weighted average assumptions used in determining the fair value of option grants were as follows:

	2002	2001	2000
Dividend yield	1.8%	1.2%	1.3%
Expected volatility	24.0%	24.0%	24.0%
Risk-free interest rate	4.0%	4.0%	4.0%
Expected life	9 yrs	9 yrs	10 yrs

These pro forma effects may not be representative of future amounts since the estimated fair value of share options on the date of grant is amortized to expense over the vesting period and additional options may be granted in future years.

viii) Deferred tax

The deferred tax asset less valuation allowance at December 31, 2002 and 2001 comprises CHF 1,507 million and CHF 2,206 million of current assets and CHF 884 million and CHF 1,029 million of non-current assets, respectively. The deferred tax liability at December 31, 2002 and 2001 comprises CHF 1,339 million and CHF 823 million of current liabilities and CHF 4,503 million and CHF 3,062 million of non-current liabilities respectively.

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ix) Employee benefit plans

The disclosures required by US GAAP are different from those provided under IAS. The following provides a reconciliation of benefit obligations, plan assets and funded status of the plans.

	Pension benefits			Other post-employment benefits		
	2002	2001	2000	2002	2001	2000
(CHF millions)						
Plan assets at fair value:						
January 1	23,361	25,426	25,454			
Actual return on plan assets	(1,646)	(737)	2,949			
Foreign currency translation	(626)	49	(18)			
Employer contribution	116	109	73			
Employee contributions	9	33	39			
Plan amendments	16	(361)				
Settlement Novartis Agribusiness			(1,851)			
Benefit payments	(1,066)	(1,158)	(1,220)			
Plan assets at December 31	20,164	23,361	25,426			
Benefit obligation:						
January 1	18,616	17,662	21,304	846	660	655
Service cost	389	359	467	19	15	11
Interest cost	774	825	857	51	52	48

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	Pension benefits			Other post-employment benefits		
Actuarial (gain) loss	(1,556)	1,379	(1,759)	184	169	(21)
Plan amendments	17	(437)		(3)	(2)	(1)
Settlement Novartis Agribusiness			(1,909)			
Foreign currency translation	(548)	(14)	(78)	(138)	15	17
Benefit payments	(1,066)	(1,158)	(1,220)	(53)	(63)	(49)
December 31	16,626	18,616	17,662	906	846	660
Funded status	3,538	4,745	7,764	(906)	(846)	(660)
Unrecognized actuarial (gain) loss	2,052	632	(2,672)	141	(58)	(160)
December 31 Prepaid (accrued) benefit costs	5,590	5,377	5,092	(765)	(904)	(820)
Prepaid benefit costs	6,603	6,469	5,783			
Accrued benefit liability	(1,013)	(1,092)	(691)	(765)	(904)	(820)
December 31 Net amount recognized in the balance sheet	5,590	5,377	5,092	(765)	(904)	(820)
Benefit cost:						
Service cost	389	359	467	19	15	11
Interest cost	774	825	857	51	52	48
Expected return on plan assets	(1,362)	(1,517)	(1,583)			
Employee contributions	(9)	(33)	(39)			
Amortization of transition (asset)			(88)			
Amortization of actuarial (gain) loss	(14)	258	28	(6)	78	(15)
Net periodic benefit (income) cost	(222)	(108)	(358)	64	145	44

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	Pension benefits			Other post-employment benefits		
	2002	2001	2000	2002	2001	2000
	%	%	%	%	%	%

Weighted-average assumptions as at December 31:

Discount rate	4.5	4.6	4.5	6.8	7.5	7.7
Rate of payroll indexation	2.8	2.8	2.8			
Expected return on plan assets	6.1	6.1	6.2			

In 2001 the Group recorded CHF 108 million of settlement gains associated with Group restructurings. In 2000, a net gain of CHF 52 million was recorded directly in shareholders' equity based on the settlement of its defined benefit pension plans attributable to Novartis Agribusiness.

The assumed health care cost trend rate at December 31, 2002 was 10%, decreasing to 4.75% in 2010. The assumed health care cost trend rate at December 31, 2001 was 9%, decreasing to 4.75% in 2006 and thereafter. A one-percentage-point change in the assumed health care cost trend rates compared to those used for 2002 would have the following effects:

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	1% point increase	1% point decrease
	(CHF millions)	(CHF millions)
Effects on total of service and interest cost components	11	(9)
Effect on post-employment benefit obligations	108	(93)
x) Foreign currency translation		

x) Foreign currency translation

The Group has accounted for operations in highly inflationary economies in accordance with IAS 21 (revised) and IAS 29. The accounting under IAS 21 (revised) and IAS 29 complies with Item 18 of Form 20-F and is different from that required by US GAAP.

xi) Adoption of SFAS 142

On January 1, 2002, the Group adopted the provisions of Statement of Financial Accounting Standards (SFAS) No. 142, *Goodwill and Other Intangible Assets* (SFAS 142).

Under the provisions of SFAS No. 142, intangible assets with indefinite lives and goodwill are no longer amortized but are subject to annual impairment tests. Separable intangible assets with definite lives continue to be amortized over their useful lives. Goodwill is the only intangible asset within the Group which is not subject to amortization under US GAAP.

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The changes in the carrying amount of goodwill for the year ended December 31, 2002 are as follows:

	Pharmaceutical division	Consumer Health division	Consumer Health Business Units						Corporate	Total
			Generics	OTC	Animal Health	Medical Nutrition	Infant & Baby	Ciba Vision		
			(CHF millions)							
January 1, 2002	760	6,738	758	3	141	198	4,881	757	9	7,507
Additions		790	645	30	115					790
Impairment losses	(607)	(46)				(25)	(21)		(9)	(662)
Goodwill written off related to disposal of business		(62)				(62)				(62)
Consolidation changes	(20)									(20)
Translation effects	(36)	(1,008)	(124)	(5)	(24)	2	(737)	(120)		(1,044)
December 31, 2002	97	6,412	1,279	28	232	113	4,123	637	0	6,509

All goodwill components were tested for impairment during 2002. The fair values of the businesses were determined using the expected present values of future cash flows.

Under IAS the Group recorded goodwill impairments of CHF 369 million as explained in Note 9.

Under SFAS 142, the Group recorded additional write-downs of CHF 293 million related mainly to the Pharmaceutical Division research and biotechnology activities of Systemix Inc. and Consumer Health Division goodwill relating to the Medical Nutrition and OTC business units. The goodwill of these activities was historically higher under US GAAP than IAS.

Adjusted net income:

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	December 31, 2002	December 31, 2001	December 31, 2000
	(CHF millions)	(CHF millions)	(CHF millions)
Reported net income	5,905	4,703	6,913
Add back: Goodwill amortization		315	262
Adjusted net income	5,905	5,018	7,175

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Basic earnings per share:

	December 31, 2002	December 31, 2001	December 31, 2000
	(CHF)	(CHF)	(CHF)
Reported basic EPS	2.44	1.90	2.74
Goodwill amortization		0.12	0.10
Adjusted basic EPS	2.44	2.02	2.84

Diluted earnings per share:

	December 31, 2002	December 31, 2001	December 31, 2000
	(CHF)	(CHF)	(CHF)
Reported diluted EPS	2.39	1.90	2.74
Goodwill amortization		0.12	0.10
Adjusted diluted EPS	2.39	2.02	2.84

The Group estimates that the aggregate amortization expense for intangibles subject to amortization for each of the five succeeding financial years will not materially differ from the current aggregate amortization expense.

xii) Effect of New Accounting Pronouncements International Accounting Standards

The Group considers that there are no issued but not yet implemented IAS standards that will have a material effect on the Group's consolidated financial statements.

xiii) Effect of New Accounting Pronouncements: US GAAP

Statement of Financial Accounting Standards SFAS 145 on "Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections as of April 2002" and SFAS 146 on "Accounting for Costs Associated with exit or Disposal Activities" will become effective for periods beginning on or after January 1, 2003. These new standards are not expected to have any material impact on the Group's consolidated financial statements.

FASB interpretation No. 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others", was issued in November 2002. This Interpretation provides further guidance for the disclosure and accounting for guarantees. The disclosure provisions have been adopted for the year ended December 31, 2002. In accordance with the Interpretation, all

guarantees entered into after December 31, 2002 are required to be recognized as a liability at fair value. This new Interpretation is not expected to have a material impact on the Group's consolidated financial statements.

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32. Subsequent Events (unaudited)

On February 10, 2003, the Group's equity affiliate Roche Holding AG announced the sale of its Vitamins and Fine Chemicals Business, related impairment charges of CHF 1.65 billion and incremental legal provisions of CHF 0.6 billion. The Group's preliminary estimate of its pre-tax share of these charges is approximately CHF 140 million. In accordance with the Group's policy, the impact of this charge as well as other changes in the Group's estimate of Roche's 2002 results of operations will be reflected in the Group's 2003 first quarter results.

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Report of Independent Accountants on Financial Statement Schedule

To the Shareholders and Board of Directors of the Novartis Group, Basel

Our audits of the consolidated financial statements referred to in our report dated January 21, 2003, appearing on page F-2 of this Form 20-F, also included an audit of the financial statement schedule listed in Item 19 of this Form 20-F. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

PricewaterhouseCoopers AG

/s/ S.A.J. BACHMANN

/s/ J.G. KAISER

S.A.J. Bachmann
Basel, January 21, 2003

J.G. Kaiser

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Novartis Group

Schedule II Valuation and qualifying accounts

(for the years ended December 31, 2002, 2001 and 2000)

Balance at beginning of period	Additions	Deductions ⁽¹⁾⁽²⁾	Balance at end of period
(CHF millions)			

Descriptions:

	Balance at beginning of period	Additions	Deductions⁽¹⁾⁽²⁾	Balance at end of period
Year ended December 31, 2002:				
Provision for doubtful receivables	(296)	(177)	167	(306)
Provision for inventories	(368)	(448)	462	(354)
Allowance for deferred taxes	(97)	(157)	51	(203)
	(761)	(782)	680	(863)
Year ended December 31, 2001:				
Provision for doubtful receivables	(248)	(146)	98	(296)
Provision for inventories ⁽³⁾	(219)	(490)	341	(368)
Allowance for deferred taxes	(237)	(31)	171	(97)
	(704)	(667)	610	(761)
Year ended December 31, 2000:				
Provision for doubtful receivables	(625)	(337)	714	(248)
Provision for inventories ⁽³⁾	(354)	(283)	418	(219)
Allowance for deferred taxes	(365)	(112)	240	(237)
	(1,344)	(732)	1,372	(704)

(1) Represents amounts used for the purposes for which the accounts were created and reversal of amounts no longer required.

(2) Included in the figures are translation adjustments of CHF 45 million and CHF 58 million (2001: CHF 2 million and CHF 2 million; 2000: CHF 19 million and CHF 4 million) for Provision for doubtful receivables and Provision for inventories respectively upon consolidation of foreign subsidiaries.

(3) Restated to conform to balance sheet inventory calculation methodology in all years.

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